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Resources
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Service

Washington

Water Supply Outlook Report

January 1, 2006



Water Supply Outlook Reports and Federal - State – Private Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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Washington Water Supply Outlook

January 2006

General Outlook

General conditions are deffinatly better than last year at this time however we are still experiencing below average snowpack and accumulated precipitation throughout most basins in the state of Washington. Reservoir storage appears to be near average in the power generation systems but below normal in the irrigation reservoirs. Weather forecast agencies are predicting equal chances for above, below or near average precipitation and a continuation of above average temperatures for the next 90-days.

Snowpack

The January 1 statewide SNOTEL readings were 82% of average. The Green River Basin snow surveys reported the lowest readings at 47% of average. Readings in the Colockum Creek area (near Wenatchee) reported the highest at 130% of average. Westside averages from SNOTEL, and January 1 snow surveys, included the North Puget Sound river basins with 67% of average, the Central Puget river basins with 71%, and the Lewis-Cowlitz basins with 88% of average. Snowpack along the east slopes of the Cascade Mountains included the Yakima area with 100% and the Wenatchee area with 96%. Snowpack in the Spokane River Basin was at 59% and the Walla Walla River Basin had 88% of average. Maximum snow cover in Washington was at Paradise SNOTEL on Mt. Rainer, with water content of 26.3 inches. This site would normally have 32.8 inches of water content on January 1. Last year at this time Lyman Lake had 14.5 inches of snow water. The highest average in the state was at Trough SNOTEL with 130% of average.

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Spokane	111	59
Newman Lake	159	72
Pend Oreille	135	85
Okanogan	117	74
Methow	143	64
Conconully Lake	175	92
Wenatchee	200	75
Chelan	135	71
Upper Yakima	306	83
Lower Yakima	256	104
Ahtanum Creek	244	114
Walla Walla	234	88
Lower Snake	137	73
Cowlitz	197	82
Lewis	239	93
White	224	104
Green	181	47
Puyallup	218	104
Cedar	290	75
Snoqualmie	293	74
Skykomish	242	75
Skagit	130	60
Baker	N/A	51
Nooksack	147	90
Olympic Peninsula	125	65

Precipitation

During the month of December, the National Weather Service and Natural Resources Conservation Service climate stations reported varying precipitation totals throughout Washington river basins. The highest percent of average in the state was at Upper Wheeler SNOTEL which reported 177% of average for a total of 7 inches. The average for this site is 3.95 inches for December. The wettest spot in the state was reported at June Lake SNOTEL with a December accumulation of 26 inches. All but two basins report below average precipitation for the water year. However the lowest is only 9% below the average with the highest sitting only 4% above.

RIVER BASIN	DECEMBER PERCENT OF AVERAGE	WATER YEAR PERCENT OF AVERAGE
Spokane	88	86
Colville-Pend Oreille	78	84
Okanogan-Methow	90	90
Wenatchee-Chelan	88	85
Upper Yakima	80	81
Lower Yakima	116	101
Walla Walla	107	92
Lower Snake	117	104
Cowlitz-Lewis	96	92
White-Green-Puyallup	92	95
Central Puget Sound	83	88
North Puget Sound	84	85
Olympic Peninsula	109	91

Reservoir

Seasonal reservoir levels in Washington vary greatly due to specific watershed management practices required in preparation for irrigation season, fisheries management, power generation, municipal demands and flood control. Reservoir storage in the Yakima Basin was 158,000-acre feet, 40% of average for the Upper Reaches and 80,000-acre feet, 72% of average for Rimrock and Bumping Lakes. Storage at the Okanogan reservoirs was 65% of average for January 1. The power generation reservoirs included the following: Coeur d'Alene Lake, 129,000 acre feet, 117% of average and 54% of capacity; Chelan Lake, 366,000-acre feet, 92% of average and 54% of capacity; and the Skagit River reservoirs at 94% of average and 77% of capacity.

BASIN	PERCENT OF CAPACITY	CURRENT STORAGE AS PERCENT OF AVERAGE
Spokane	54	117
Colville-Pend Oreille	54	125
Okanogan-Methow	47	68
Wenatchee-Chelan	54	92
Upper Yakima	19	40
Lower Yakima	34	72
Lower Snake	66	103
Cowlitz-Lewis	N/A	N/A
North Puget Sound	77	94

Streamflow

Final January forecasts vary from 107% of average for the S.F. Walla Walla River to 67% of average for Okanogan River at Malott. April-September forecasts for some Western Washington streams include the Cedar River near Cedar Falls, 89%; White River, 85%; and Skagit River, 88%. Some Eastern Washington streams include the Yakima River near Parker, 89%; Wenatchee River at Plain, 82%; and Spokane River near Post Falls, 88%. Volumetric forecasts are developed using current, historic and average snowpack, precipitation and streamflow data collected and coordinated by organizations cooperating with NRCS. Caution should be used when using early season forecasts for critical water resource management decisions.

Statewide December streamflows were mostly below average due to the extended period of cool dry weather we experienced. The Methow River near Pateros had the highest reported flows with 119% of average. The Yakima River at Kiona with 43% of average was the lowest in the state. Other streamflows were the following percentage of average as reported by the River Forecast Center: the Cowlitz at Castle Rock, 77%; the Spokane at Spokane, 80%; the Columbia below Rock Island Dam, 81%; and the Cle Elum near Roslyn, 72%.

BASIN	PERCENT OF AVERAGE (50 PERCENT CHANCE OF EXCEEDENCE)
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Spokane	79-90
Colville-Pend Oreille	81-97
Okanogan-Methow	67-76
Wenatchee-Chelan	79-92
Upper Yakima	78-82
Lower Yakima	89-99
Walla Walla	90-105
Lower Snake	100-107
Cowlitz-Lewis	89-96
White-Green-Puyallup	82-85
Central Puget Sound	85-89
North Puget Sound	88-90
Olympic Peninsula	94-97

STREAM	PERCENT OF AVERAGE DECEMBER STREAMFLOWS
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Pend Oreille Below Box Canyon	81
Kettle at Laurier	89
Columbia at Birchbank	105
Spokane at Long Lake	78
Similkameen at Nighthawk	75
Okanogan at Tonasket	68
Methow at Pateros	119
Chelan at Chelan	89
Wenatchee at Pashastin	73
Yakima at Cle Elum	64
Yakima at Parker	72
Naches at Naches	87
Grande Ronde at Troy	62
Snake below Lower Granite Dam	76
SF Walla Walla near Milton Freewater	78
Columbia River at The Dalles	83
Lewis at Ariel	75
Cowlitz below Mayfield Dam	77
Skagit at Concrete	99
Dungeness near Sequim	110

BASIN SUMMARY OF SNOW COURSE DATA

JANUARY 2006

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
ALPINE MEADOWS SNTL	3500	1/01/06	28	16.2	7.0	20.1
BADGER PASS SNOTEL	6900	1/01/06	36	10.0	9.1	15.2
BARKER LAKES SNOTEL	8250	1/01/06	33	7.6	4.9	6.7
BASIN CREEK SNOTEL	7180	1/01/06	21	4.7	2.3	3.7
BEAVER CREEK TRAIL	2200	12/29/05	0	.0	1.8	--
BEAVER PASS	3680	12/29/05	23	5.3	4.3	--
BEAVER PASS SNOTEL	3680	1/01/06	50	12.7	8.6	--
BERNE-MILL CREEK (d)	3170	12/30/05	38	7.5	3.4	12.6
BLACK PINE SNOTEL	7100	1/01/06	21	5.1	3.5	5.2
BLACKWALL PEAK CAN.	6370	1/01/06	---	9.0	10.0	15.4
BLEWETT PASS#2SNOTEL	4270	1/01/06	26	6.9	1.3	8.2
BRENDA MINE CAN.	4450	1/01/06	---	5.6	6.5	5.9
BROWN TOP AM	6000	1/03/06	67	19.6	13.7	--
BUMPING RIDGE SNOTEL	4600	1/01/06	50	13.1	3.8	12.1
BUNCHGRASS MDWSNOTEL	5000	1/01/06	44	10.2	10.5	12.6
BURNT MOUNTAIN PIL	4200	1/01/06	---	1.5	.8	--
CHESSMAN RESERVOIR	6200	12/28/05	2	.6	.5	1.5
CHIWAUKUM G.S.	2500	12/30/05	18	3.8	2.8	5.2
COMBINATION SNOTEL	5600	1/01/06	6	2.3	.8	2.2
COPPER BOTTOM SNOTEL	5200	1/01/06	13	4.0	.7	5.3
CORRAL PASS SNOTEL	6000	1/01/06	---	14.6	8.0	15.8
COUGAR MTN. SNOTEL	3200	1/01/06	21	3.0	1.5	8.5
COYOTE HILL	4200	12/29/05	14	3.1	1.9	4.3
DALY CREEK SNOTEL	5780	1/01/06	14	4.9	3.9	4.9
DEVILS PARK	5900	1/03/06	41	10.0	--	--
DISCOVERY BASIN	7050	12/30/05	21	4.3	2.8	4.2
DX HILL	6400	1/01/06	21	5.3	2.3	4.5
DUNGENESS SNOTEL	4100	1/01/06	5	1.1	.8	--
ELBOW LAKE SNOTEL	3200	1/01/06	19	7.7	4.4	8.6
EMERY CREEK SNOTEL	4350	1/01/06	22	4.4	4.0	7.0
FARRON CAN.	4000	1/03/06	24	6.0	5.8	--
FISH CREEK	8000	12/21/05	17	3.7	1.2	4.4
FISH LAKE SNOTEL	3370	1/01/06	48	10.9	4.9	15.0
FLATTOP MTN SNOTEL	6300	1/01/06	52	13.8	17.0	21.4
FOURTH OF JULY SUM	3200	12/30/05	5	1.5	1.0	3.7
FREEZEOUT CK. TRAIL	3500	12/29/05	20	1.e	--	--
FROHNER MDWS SNOTEL	6480	1/01/06	14	3.6	3.1	3.4
GRASS MOUNTAIN #2	2900	12/29/05	0	.0	.8	4.6
GRAVE CRK SNOTEL	4300	1/01/06	21	5.6	5.3	7.7
GREEN LAKE SNOTEL	6000	1/01/06	51	12.6	5.4	10.7
GREYBACK RES CAN.	4700	1/03/06	21	3.2	4.6	4.3
GROUSE CAMP SNOTEL	5380	1/01/06	49	12.4	4.3	9.6
HAND CREEK SNOTEL	5030	1/01/06	15	4.2	2.6	5.9
HARTS PASS SNOTEL	6500	1/01/06	65	13.9	9.2	21.7
HELL ROARING DIVIDE	5770	12/29/05	40	10.2	10.8	13.4
HIGH RIDGE SNOTEL	4980	1/01/06	34	9.5	4.2	10.4
HOODOO BASIN SNOTEL	6050	1/01/06	67	17.1	12.3	19.3
HUCKLEBERRY SNOTEL	2000	1/01/06	---	.4	.4	--
HUMBOLDT GLCH SNOTEL	4250	1/01/06	---	2.0	1.7	6.0
ISINTOK LAKE CAN.	5100	12/29/05	9	1.6	1.8	3.4
JUNE LAKE SNOTEL	3200	1/01/06	34	16.2	6.3	17.1
KELLOGG PEAK	5560	1/03/06	30	8.0	7.0	11.7
KLESILKWA CAN.	3450	1/03/06	6	1.2	.0	4.6
KRAFT CREEK SNOTEL	4750	1/01/06	16	4.6	3.4	6.9
LESTER CREEK	3100	12/29/05	22	5.6	2.5	8.5
LOLO PASS SNOTEL	5240	1/01/06	42	11.4	6.8	13.0
LONE PINE SNOTEL	3800	1/01/06	---	12.1	6.9	16.2
LOOKOUT SNOTEL	5140	1/01/06	29	7.3	6.4	13.7
LOST HORSE SNOTEL	5000	1/01/06	39	9.1	3.5	8.3
LOST LAKE SNOTEL	6110	1/01/06	---	17.7	15.9	27.1
LUBRECHT FOREST NO 3	5450	12/28/05	10	1.9	.8	2.7
LUBRECHT FOREST NO 4	4650	12/28/05	5	1.3	.6	1.4
LUBRECHT FOREST NO 6	4040	12/28/05	8	1.6	.4	1.6
LUBRECHT HYDROPLLOT	4200	12/28/05	12	3.0	1.0	2.5
LUBRECHT SNOTEL	4680	1/01/06	7	2.1	.8	2.6
LYMAN LAKE SNOTEL	5900	1/01/06	88	22.5	18.4	29.7
LYNN LAKE	4000	12/29/05	12	3.5	3.4	8.2
MARIAS PASS	5250	12/29/05	12	4.0	2.6	7.3
MEADOWS CABIN	1900	12/29/05	20	1.e	--	--
MEADOWS PASS SNOTEL	3240	1/01/06	28	9.4	2.3	9.6
MERRITT	2140	12/30/05	12	2.4	1.3	7.0
M F NOOKSACK SNOTEL	4980	1/01/06	39	13.0	11.0	--
MICA CREEK SNOTEL	4750	1/01/06	24	6.6	6.2	11.7

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
MINERS RIDGE SNOTEL	6200	1/01/06	---	18.8	15.0	26.6
MISSEZULA MTN CAN.	5080	12/26/05	6	1.1	1.5	--
MISSION CREEK CAN.	5840	1/01/06	---	6.1	14.3	9.3
MORRISSEY RIDGE CAN.	6100	1/01/06	---	8.8	--	12.4
MORSE LAKE SNOTEL	5400	1/01/06	90	26.0	9.9	23.4
MOSES MTN SNOTEL	4800	1/01/06	34	8.7	3.3	7.1
MOSQUITO RDG SNOTEL	5200	1/01/06	---	11.1	12.9	15.5
MOULTON RESERVOIR	6850	12/20/05	20	4.2	1.0	3.5
MOUNT CRAG SNOTEL	4050	1/01/06	26	7.5	6.1	11.6
MT. KOBAN CAN.	5500	12/29/05	22	5.0	4.0	5.4
MOWICH SNOTEL	3150	1/01/06	0	.0	.5	--
MOUNT GARDNER SNOTEL	2860	1/01/06	13	3.5	.4	7.4
N.F. ELK CR SNOTEL	6250	1/01/06	26	5.9	4.1	5.1
NEVADA RIDGE SNOTEL	7020	1/01/06	29	7.4	4.7	6.8
NEW HOZOMEEN LAKE	2800	12/29/05	0	.0	.1	--
NEZ PERCE CMP SNOTEL	5650	1/01/06	27	7.1	3.7	6.1
NOISY BASIN SNOTEL	6040	1/01/06	66	17.9	15.4	19.8
OLALLIE MDWS SNOTEL	3960	1/01/06	50	19.9	6.0	22.2
OPHIR PARK	7150	1/01/06	31	7.9	3.5	6.6
PARADISE PARK SNOTEL	5500	1/01/06	---	26.3	14.5	32.8
PARK CK RIDGE SNOTEL	4600	1/01/06	63	17.6	9.7	22.5
PETERSON MDW SNOTEL	7200	1/01/06	22	4.9	2.8	4.4
PIGTAIL PEAK SNOTEL	5900	1/01/06	78	22.0	10.0	23.1
PIKE CREEK SNOTEL	5930	1/01/06	25	7.7	7.1	12.0
PIPESTONE PASS	7200	12/28/05	9	2.0	.5	2.2
POPE RIDGE SNOTEL	3540	1/01/06	46	9.2	4.5	9.8
POTATO HILL SNOTEL	4500	1/01/06	---	12.3	4.7	12.4
QUARTZ PEAK SNOTEL	4700	1/01/06	24	7.3	4.6	10.2
RAINY PASS SNOTEL	4780	1/01/06	47	11.3	9.0	19.9
REX RIVER SNOTEL	1900	1/01/06	23	8.6	4.1	13.0
ROCKER PEAK SNOTEL	8000	1/01/06	30	7.5	3.7	6.4
SF THUNDER CK AM	2200	1/01/06	---	.0e	--	5.0
SADDLE MTN SNOTEL	7900	1/01/06	52	12.3	7.5	11.7
SALMON MDWS SNOTEL	4500	1/01/06	33	4.9	2.8	5.3
SASSE RIDGE SNOTEL	4200	1/01/06	61	11.4	4.8	14.7
SAVAGE PASS SNOTEL	6170	1/01/06	42	9.9	7.6	11.7
SAWMILL RIDGE	4700	12/29/05	12	3.5	3.2	13.8
SCHREIBERS MDW AM	3400	1/01/06	---	14.4e	--	23.2
SENTINEL BT SNOTEL	4920	1/01/06	25	4.9	3.2	--
SHEEP CANYON SNOTEL	4050	1/01/06	22	7.6	5.9	15.4
SHEERWIN SNOTEL	3200	1/01/06	---	2.4	1.6	5.1
SKALKAHO SNOTEL	7260	1/01/06	43	11.0	5.6	10.3
SKOOKUM CREEK SNOTEL	3920	1/01/06	6	2.8	1.3	10.8
SOURDOUGH GULCH SNTL	4000	1/01/06	0	.0	.0	--
SPENCER MDW SNOTEL	3400	1/01/06	---	12.3	4.6	12.5
SPIRIT LAKE SNOTEL	3100	1/01/06	---	1.3	2.4	--
SPRUCE SPRINGS SNTL	5700	1/01/06	22	6.2	3.0	--
STAHL PEAK SNOTEL	6030	1/01/06	56	14.8	16.9	17.1
STAMPEDE PASS SNOTEL	3860	1/01/06	---	14.7	4.0	19.4
STEVENS PASS SNOTEL	4070	1/01/06	58	14.1	6.5	19.1
STEVENS PASS SAND SD	3700	1/02/06	44	10.6	3.4	15.3
STORM LAKE	7780	12/30/05	32	7.5	4.2	5.5
SUMMERLAND RES CAN.	4200	12/29/05	17	3.2	3.2	4.5
SUNSET SNOTEL	5540	1/01/06	---	6.2	5.8	13.6
SURPRISE LKS SNOTEL	4250	1/01/06	---	20.7	7.8	20.3
SWAMP CREEK SNOTEL	4000	1/01/06	12	2.8	3.0	--
TEN MILE LOWER	6600	12/28/05	18	4.4	1.0	3.0
TEN MILE MIDDLE	6800	12/28/05	14	3.3	2.6	4.6
THUNDER BASIN SNOTEL	4200	1/01/06	---	10.6	9.6	15.7
TINKHAM CREEK SNOTEL	3000	1/01/06	36	10.1	4.1	12.3
TOUCHET SNOTEL	5530	1/01/06	44	12.7	5.3	14.7
TROUGH #2 SNOTEL	5310	1/01/06	32	6.9	1.3	5.3
TUNNEL AVENUE	2450	1/01/06	---	4.9e	1.2	8.3
TWELVEMILE SNOTEL	5600	1/01/06	28	8.4	4.7	7.5
TWIN CAMP	4100	1/01/06	17	4.2	3.7	10.2
TWIN LAKES	2700	12/29/05	17	4.2	--	--
TWIN LAKES SNOTEL	6400	1/01/06	57	17.5	12.1	17.5
UPPER WHEELER SNOTEL	4400	1/01/06	28	6.4	2.8	5.9
WARM SPRINGS SNOTEL	7800	1/01/06	44	11.3	6.6	9.4
WATERHOLE SNOTEL	5000	1/01/06	17	6.5	--	--
WEASEL DIVIDE	5450	12/30/05	40	10.2	11.9	15.2
WELLS CREEK SNOTEL	4200	1/01/06	33	9.5	7.3	--
WHITE PASS ES SNOTEL	4500	1/01/06	39	9.6	2.6	10.7



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Helpful Internet Addresses

NRCS Snow Survey and Climate Services Homepages

Washington:
<http://www.wa.nrcs.usda.gov/snow>

Oregon:
<http://www.or.nrcs.usda.gov/snow>

Idaho:
<http://www.id.nrcs.usda.gov/snow>

National Water and Climate Center (NWCC):
<http://www.wcc.nrcs.usda.gov>

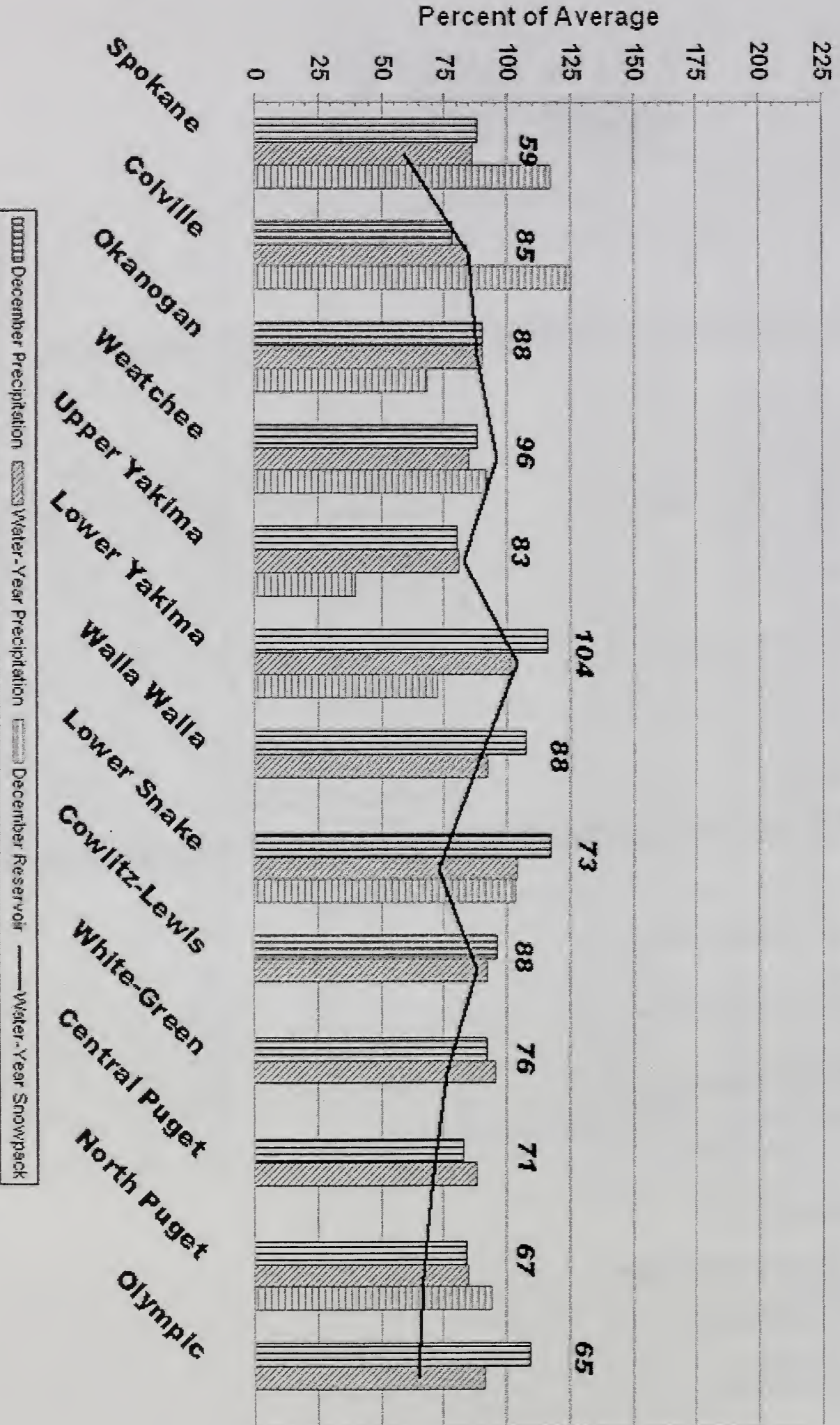
NWCC Anonymous FTP Server:
<ftp.wcc.nrcs.usda.gov>

USDA-NRCS Agency Homepages

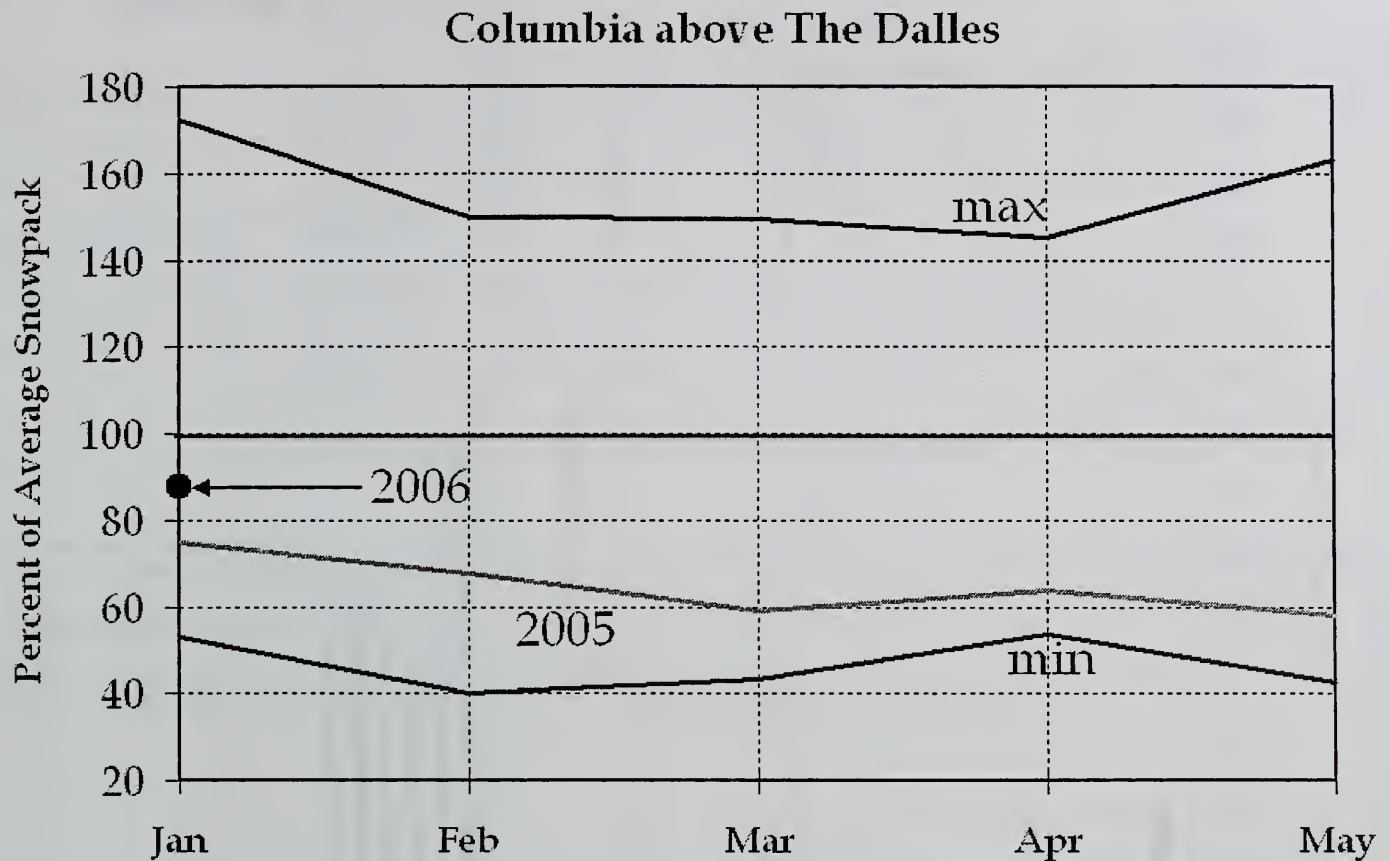
Washington:
<http://www.wa.nrcs.usda.gov>

NRCS National:
<http://www.nrcs.usda.gov>

January 1, 2006 - Snowpack, Precipitation and Reservoir Conditions at a Glance (Water Year = October 1, 2005 - Current Date)



Columbia Basin Snowpack Summary



January 1, 2006

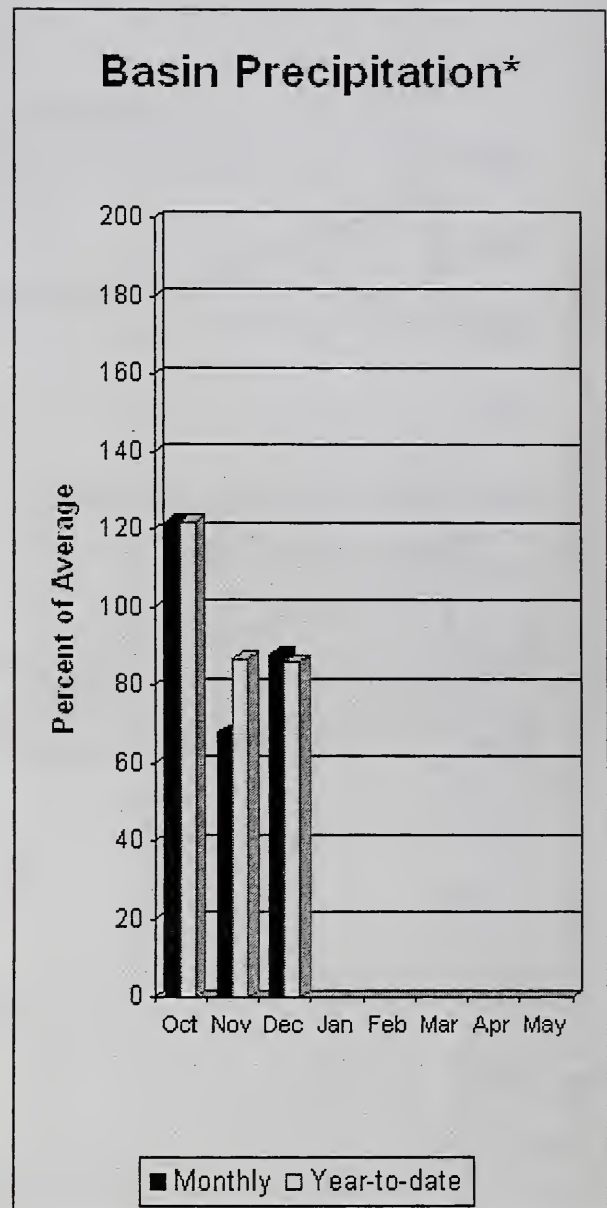
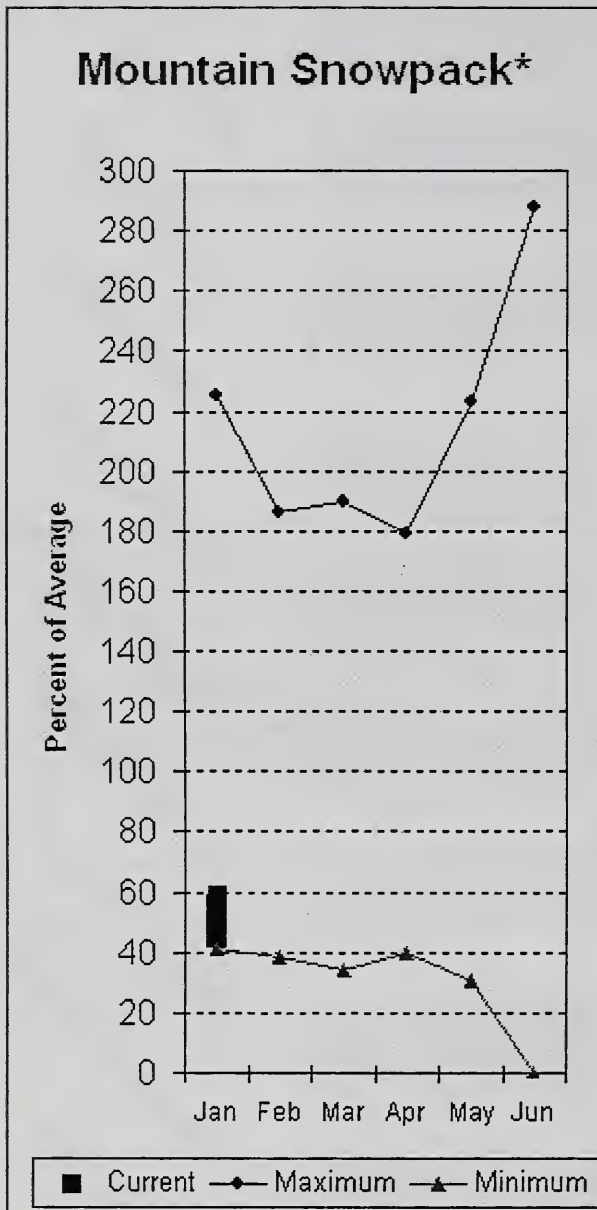
The combined Columbia Basin snowpack above The Dalles is currently at 88 percent of average. This compares to 75 percent of average last year. The overall snowpack is at 39 percent of the average peak accumulation. This compares to 33 percent last year.

The snowpack in the Columbia Basin above Castlegar is at 75 percent of average. This compares to 81 percent last year. For the basin above Grand Coulee, the snowpack is at 78 percent of average, compared to 79 percent last year. The Snake River snowpack above Ice Harbor is at 110 percent of average, compared to 73 percent last year.

The best snowpack conditions exist in the Upper Snake, Boise, Salmon, Clark Fork, and Eastern Oregon basins. At the present time, the high runoff producing watersheds in British Columbia, Flathead, and Clearwater basins are below normal. The North Cascade snowpack isn't as bad as last year, but is still below normal. The Southern Cascade snowpack is above normal this year and is much better than last year's meager snowpack.

Heavy precipitation is expected over the Columbia Basin during the next week to ten days. If the forecasts verify, February's snowpack could be much improved over this month.

Spokane River Basin



*Based on selected stations

The January 1 forecasts for summer runoff within the Spokane River Basin are 88% of average near Post Falls and 90% at Long Lake. The Chamokane River near Long Lake forecasted to have 79% of average flows for the May-August period. The forecast is based on a basin snowpack that is 59% of average and precipitation that is 86% of average for the water year. Precipitation for December was below normal at 88% of average. Streamflow on the Spokane River at Long Lake was 78% of average for December. January 1 storage in Coeur d'Alene Lake was 129,000 acre feet, 117% of average and 54% of capacity. Snowpack at Quartz Peak SNOTEL site was 72% of average with 7.3 inches of water content. Average temperatures in the Spokane basin were 2 degrees below normal December and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Spokane River Basin

SPOKANE RIVER BASIN Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
SPOKANE near Post Falls (2)	APR-SEP	1480	1980	2330	88	2680	3180	2650
	APR-JUL	1410	1900	2240	88	2580	3070	2550
SPOKANE at Long Lake (2)	APR-JUL	1480	2120	2550	90	2980	3620	2850
	APR-SEP	1630	2300	2760	90	3220	3890	3070
CHAMOKANE CREEK near Long Lake	MAY-AUG	4.8	6.0	8.1	79	10.2	13.3	10.2

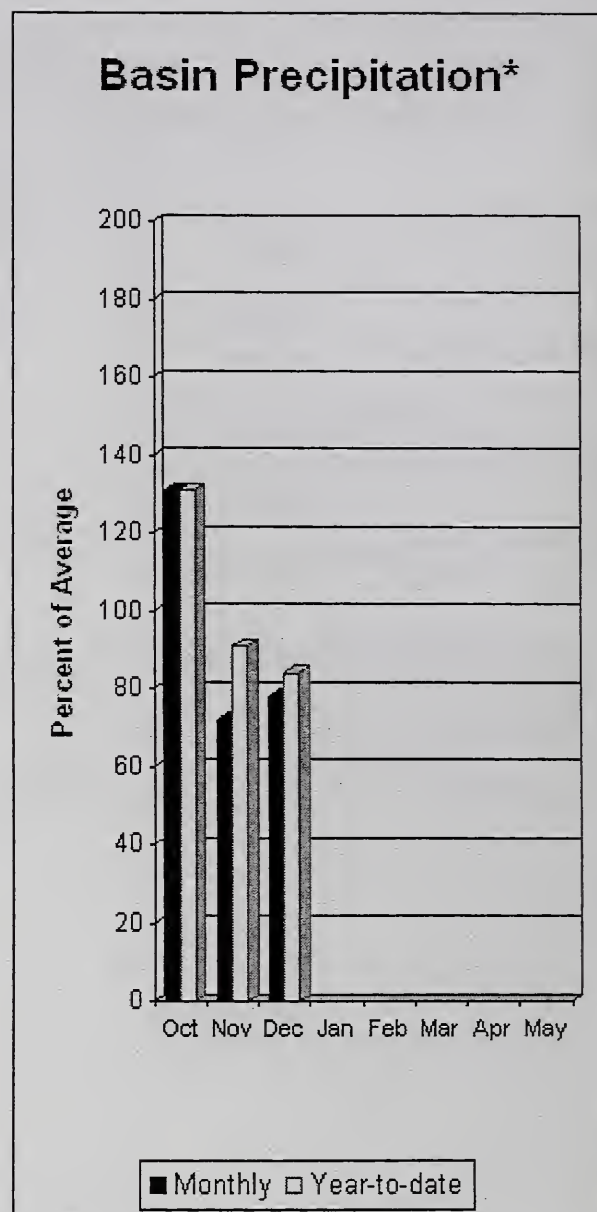
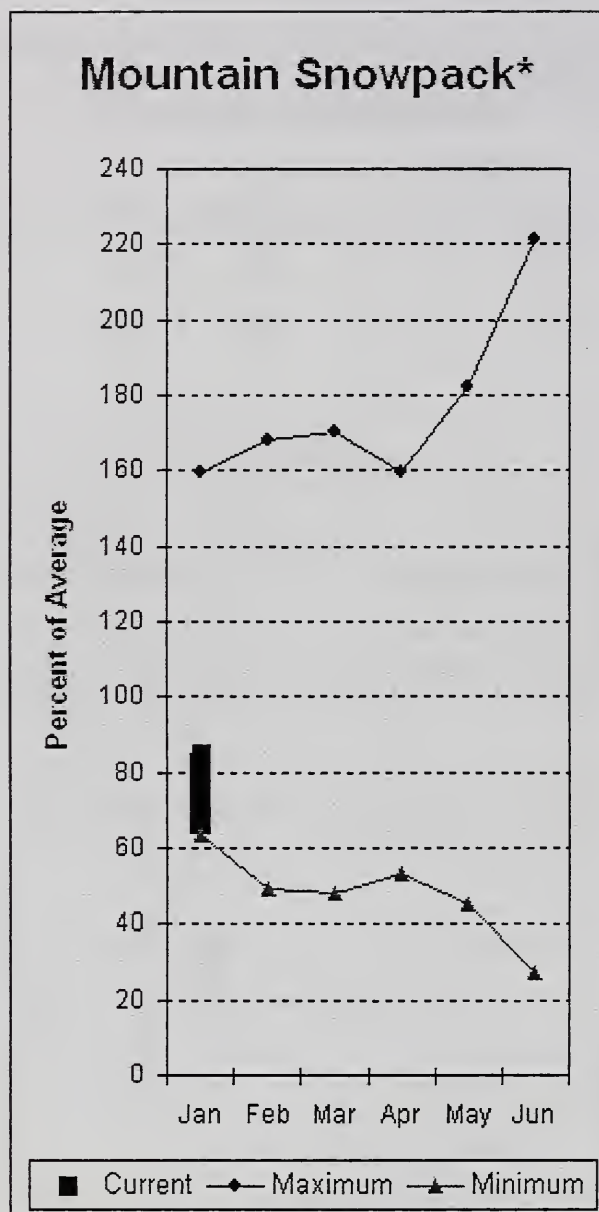
SPOKANE RIVER BASIN Reservoir Storage (1000 AF) - End of December					SPOKANE RIVER BASIN Watershed Snowpack Analysis - January 1, 2006			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COEUR D'ALENE	238.5	129.1	110.5	110.1	SPOKANE RIVER	10	111	59
					NEWMAN LAKE	1	159	72

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Colville - Pend Oreille River Basins



*Based on selected stations

The April – September average forecast for the Kettle River streamflow is 96%, Colville at Kettle Falls is 81% and Priest River near the town of Priest River is 95%. December streamflow was 81% of average on the Pend Oreille River, 105% on the Columbia at the International Boundary and 89% on the Kettle River. January 1 snow cover was 85% of average in the Pend Oreille Basin River Basin. Bunchgrass Meadows SNOTEL site had 10.2 inches of snow water on the snow pillow. Normally Bunchgrass would have 12.6 inches on January 1. Precipitation during December was 78% of average, bringing the year-to-date precipitation to 84% of average. Reservoir storage in the basin, including Lake Pend Oreille and Priest Lake was 125% of normal. Average temperatures were 1 degree below normal for December and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Colville - Pend Oreille River Basins

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
PEND OREILLE Lake Inflow (2)	APR-JUL	8140	10620	12300	97	13980	16460	12700
	APR-SEP	8860	11560	13400	96	15240	17940	13900
PRIEST near Priest River (1,2)	APR-JUL	570	710	775	95	840	980	815
	APR-SEP	495	720	825	95	930	1155	870
PEND OREILLE bl Box Canyon (2)	APR-JUL	8910	11050	12500	97	13950	16090	12900
	APR-SEP	9060	11760	13600	97	15440	18140	14100
COLVILLE at Kettle Falls	APR-SEP	61	93	114	81	135	167	141
	APR-JUL	53	83	103	81	123	153	128
KETTLE near Laurier	APR-SEP	1500	1740	1900	96	2060	2300	1970
	APR-JUL	1430	1660	1810	97	1960	2190	1870
COLUMBIA at Birchbank (1,2)	APR-JUL	23407	29110	31700	91	34290	39990	34900
	APR-SEP	29113	36256	39500	91	42740	49890	43500
COLUMBIA at Grand Coulee Dm (1,2)	APR-SEP	40645	53130	58800	92	64470	76950	64000
	APR-JUL	34276	44745	49500	92	54250	64720	53800

COLVILLE - PEND OREILLE RIVER BASINS Reservoir Storage (1000 AF) - End of December

COLVILLE - PEND OREILLE RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

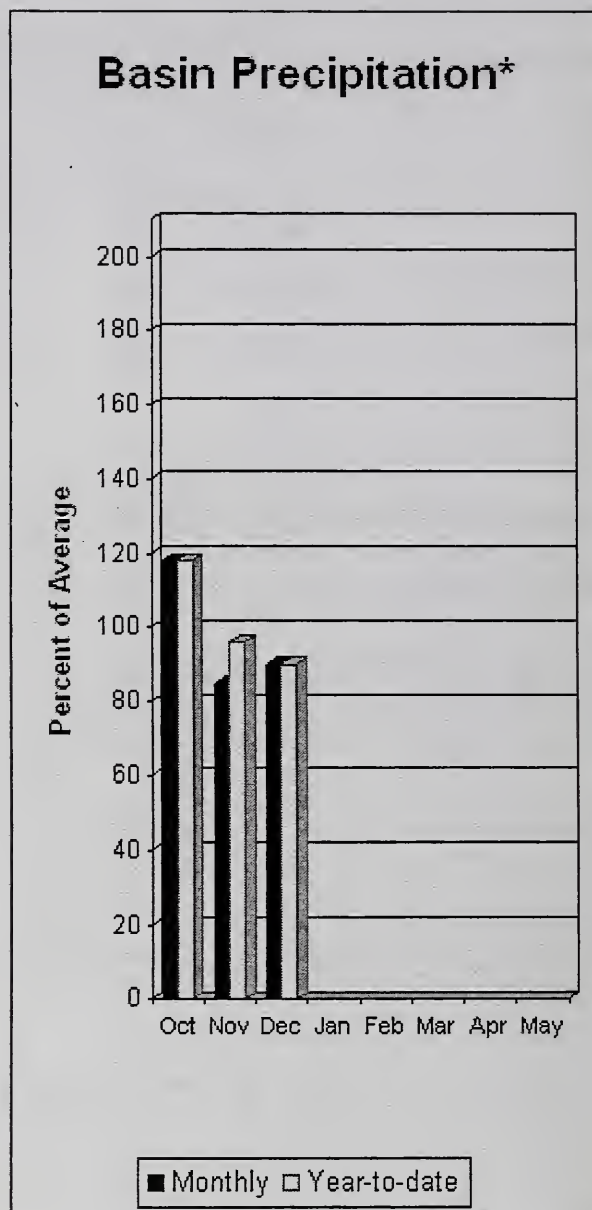
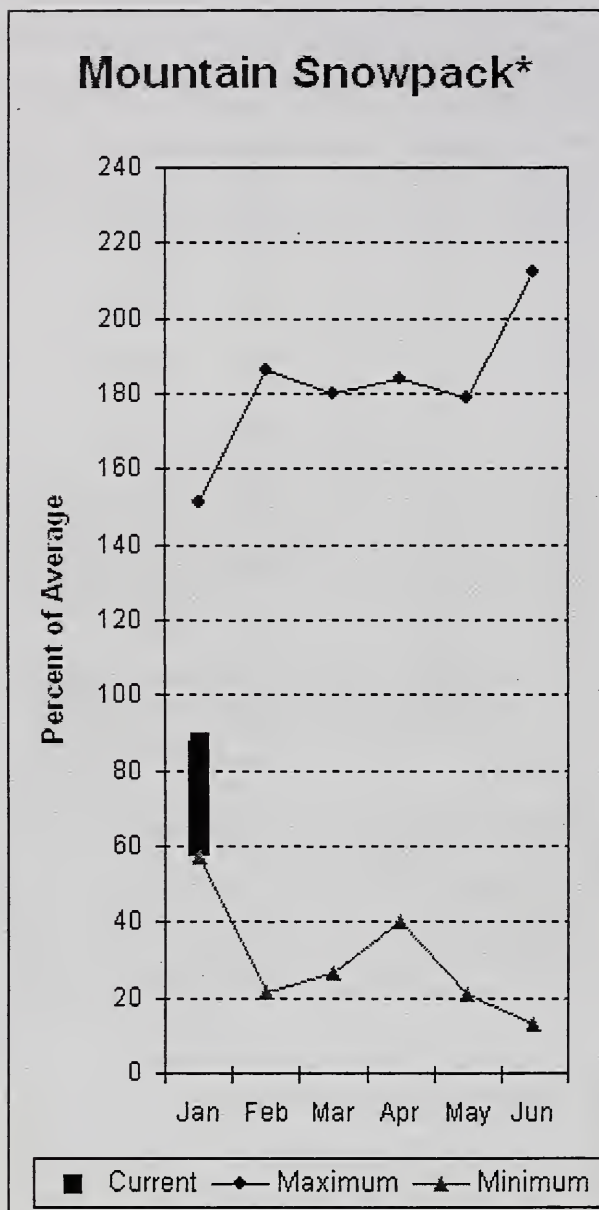
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ROOSEVELT		NO REPORT			COLVILLE RIVER	0	0	0
PEND OREILLE	1561.3	853.7	898.5	673.4	PEND OREILLE RIVER	9	118	72
PRIEST LAKE	119.3	56.6	59.1	55.7	KETTLE RIVER	2	63	75

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Okanogan - Methow River Basins



*Based on selected stations

Summer runoff average forecast for the Okanogan River is 68%, Similkameen River is 72%, Methow River is 74% and Salmon Creek is 69%. January 1 snow cover on the Okanogan was 74% of average, Omak Creek was 123% and the Methow was 64%. December precipitation in the Okanogan-Methow was 90% of average, with precipitation for the water year at 90% of average. December streamflow for the Methow River was 119% of average, 68% for the Okanogan River and 75% for the Similkameen. Snow-water content at Salmon Meadows SNOTEL was 4.9 inches. Average for this site is 5.3 inches on January 1. Combined storage in the Conconully Reservoirs was 11,000-acre feet, which is 47% of capacity and 68% of the January 1 average. Temperatures were near normal for December and for the water year.

For more information contact your local Natural Resources Conservation Service office.

Okanogan - Methow River Basins

Streamflow Forecasts - January 1, 2006

		<===== Drier ===== Future Conditions ===== Wetter =====>						
Forecast Point	Forecast Period	===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
=====								
SIMILKAMEEN near Nighthawk (1)	APR-JUL	600	820	970	72	1180	1630	1350
	APR-SEP	612	867	1040	72	1280	1810	1450
OKANOGAN near Tonasket (1)	APR-JUL	650	900	1070	68	1320	1870	1580
	APR-SEP	696	996	1200	68	1500	2160	1770
OKANOGAN at Malott (1)	APR-JUL	670	926	1100	67	1360	1930	1635
	APR-SEP	717	1023	1230	67	1540	2220	1826
Salmon Creek nr Conconully	APR-JUL	5.2	9.4	12.9	69	17.0	24	18.7
	APR-SEP	5.2	9.7	13.5	69	17.9	26	19.7
TOATS COULEE CREEK nr Loomis	APR-JUL	4.6	13.8	20	71	29	41	28
	APR-SEP	5.5	14.7	21	70	30	43	30
Beaver Creek blw SF nr Twisp	APR-SEP	2.6	6.5	9.2	76	12.7	17.9	12.1
	APR-JUL	2.0	5.9	8.5	77	11.9	17.0	11.1
METHOW RIVER near Pateros	APR-SEP	330	565	725	74	885	1120	985
	APR-JUL	390	555	670	74	785	955	910

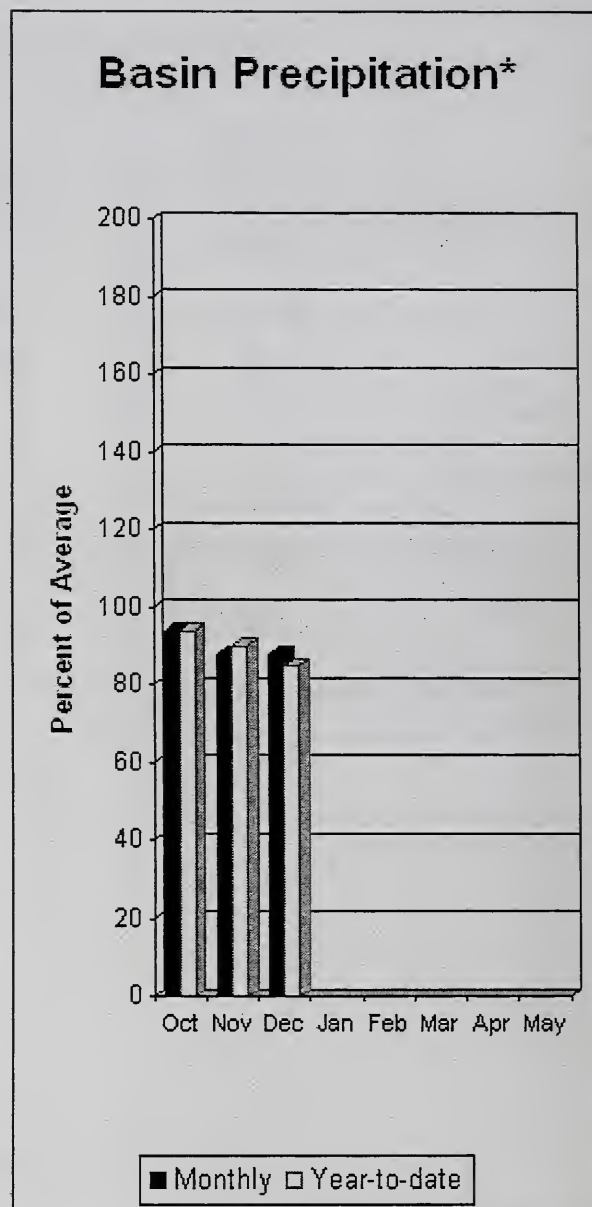
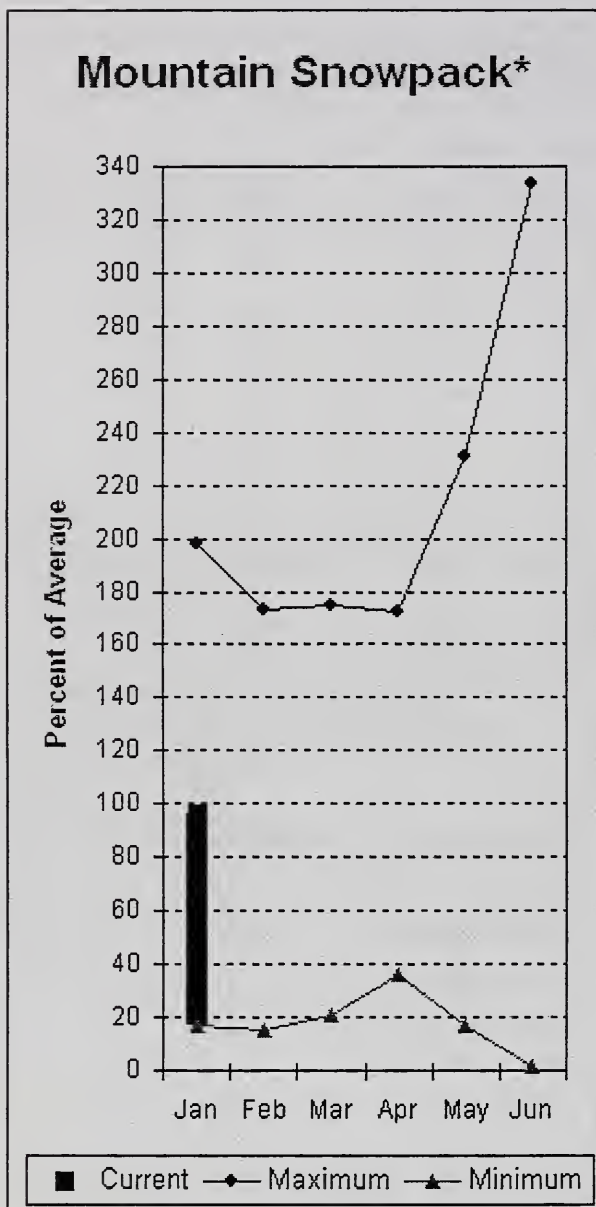
OKANOGAN - METHOW RIVER BASINS Reservoir Storage (1000 AF) - End of December					OKANOGAN - METHOW RIVER BASINS Watershed Snowpack Analysis - January 1, 2006			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
SALMON LAKE	10.5	7.4	6.3	8.5	OKANOGAN RIVER	7	117	74
CONCONULLY RESERVOIR	13.0	3.6	4.2	7.7	OMAK CREEK	1	264	123
					SANPOIL RIVER	0	0	0
					SIMILKAMEEN RIVER	1	73	28
					TOATS COULEE CREEK	0	0	0
					CONCONULLY LAKE	1	175	92
					METHOW RIVER	3	143	64

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Wenatchee - Chelan River Basins



*Based on selected stations

Precipitation during December was 88% of average in the basin and 85% for the year-to-date. Runoff for Entiat River is forecast to be 79% of average for the summer. The January-September average forecast for Chelan River is 81%, Wenatchee River at Plain is 82% and Stehekin is 84%. Icicle, Stemilt and Squilchuck creeks are all forecasted to have below average flows as well. December average streamflows on the Chelan River were 89% and on the Wenatchee River 73%. January 1 snowpack in the Wenatchee River Basin was 75% of average; the Chelan, 71%; the Entiat, 94%; Stemilt Creek, 108% and Colockum Creek, 130%. Reservoir storage in Lake Chelan was 366,000-acre feet, 92% of January 1 average and 54% of capacity. Lyman Lake SNOTEL had the most snow water with 22.5 inches of water. This site would normally have 29.7 inches on January 1. Temperatures were 1 degrees below normal for December and for the water year.

For more information contact your local Natural Resources Conservation Service office.

Wenatchee - Chelan River Basins

Streamflow Forecasts - January 1, 2006

		<===== Drier ===== Future Conditions ===== Wetter =====>						
Forecast Point	Forecast Period	=====		Chance Of Exceeding *		=====		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
=====								
CHELAN RIVER near Chelan	APR-SEP	810	900	960	81	1020	1110	1190
	APR-JUL	725	795	845	81	890	960	1050
STEHEKIN near STEHEKIN	APR-SEP	585	650	695	84	740	805	830
	APR-JUL	510	555	585	84	615	660	700
ENTIAT RIVER nr Ardenvoir	APR-SEP	118	161	190	79	217	262	240
	APR-JUL	103	143	170	79	198	238	215
WENATCHEE at Plain	APR-SEP	695	865	985	82	1105	1275	1200
	APR-JUL	650	790	885	82	985	1125	1080
WENATCHEE R. at Peshastin	APR-SEP	870	1150	1340	82	1530	1810	1640
	APR-JUL	669	991	1210	82	1430	1750	1480
STEMILT CK nr Wenatchee (miner's in)	MAY-SEP	48	85	110	80	135	170	138
ICICLE CREEK near Leavenworth	APR-SEP	220	260	285	83	310	350	345
	APR-JUL	205	240	265	83	290	325	320
COLUMBIA R. bl Rock Island Dam (2)	APR-SEP	43360	57339	63700	92	70060	84370	69500
	APR-JUL	37135	47236	54100	92	60960	71060	59000

WENATCHEE - CHELAN RIVER BASINS Reservoir Storage (1000 AF) - End of December

WENATCHEE - CHELAN RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CHELAN LAKE	676.1	366.4	431.8	396.9	CHELAN LAKE BASIN	4	135	71
					ENTIAT RIVER	1	204	94
					WENATCHEE RIVER	11	203	75
					STEMILT CREEK	1	229	108
					COLOCKUM CREEK	1	531	130

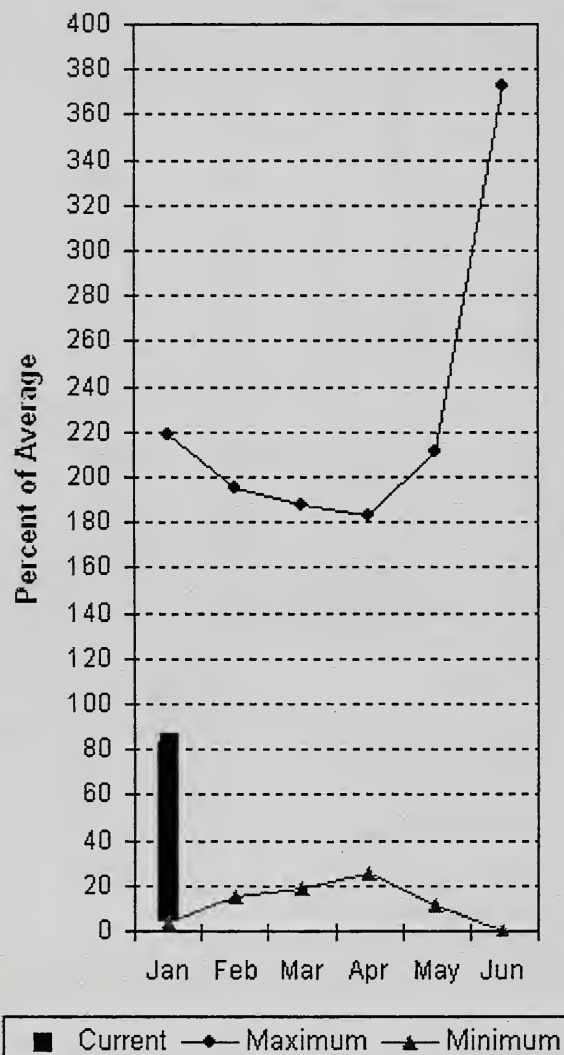
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The average is computed for the 1971-2000 base period.

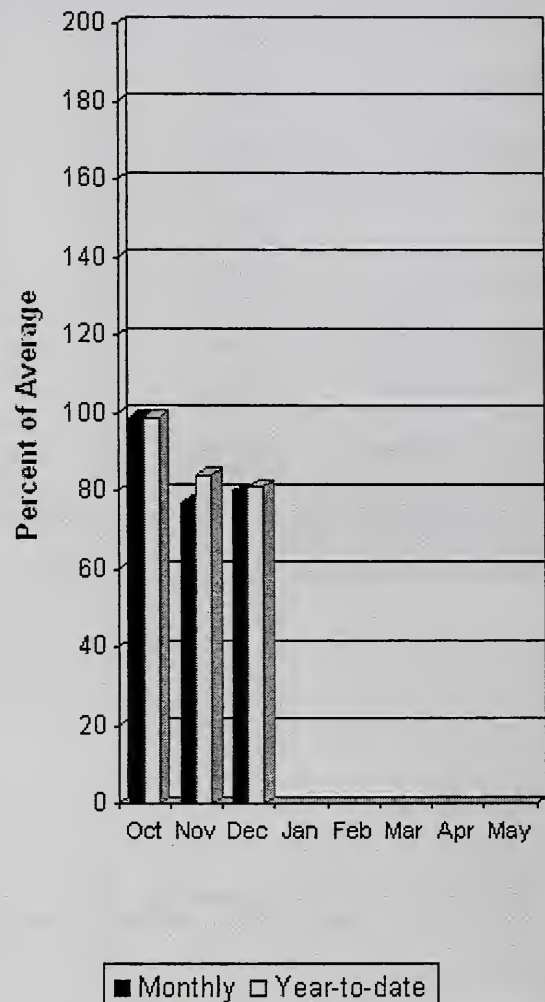
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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper Yakima River Basin

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

January 1 reservoir storage for the Upper Yakima reservoirs was 158,000-acre feet, 40% of average. Forecasts for the Yakima River at Cle Elum are 80% of average and the Teanaway River near Cle Elum is at 82%. Lake inflows are all forecasted to be near that same range this summer. December streamflows within the basin were Yakima near Cle Elum at 64% and Cle Elum River near Roslyn at 72%. January 1 snowpack was 83% based upon 7 snow course and SNOTEL readings within the Upper Yakima Basin. Precipitation was 80% of average for December and 81% year-to-date for water. Volume forecasts for the Yakima Basin are for natural flow. As such, they may differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

For more information contact your local Natural Resources Conservation Service office.

Upper Yakima River Basin

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
KEECHELUS LAKE INFLOW	APR-JUL	60	82	97	80	112	134	121
	APR-SEP	67	91	107	81	123	147	133
KACHESS LAKE INFLOW	APR-JUL	52	74	88	79	102	124	111
	APR-SEP	57	80	95	79	110	133	120
CLE ELUM LAKE INFLOW	APR-JUL	225	290	330	81	370	435	410
	APR-SEP	245	315	360	80	405	475	450
YAKIMA at Cle Elum	APR-JUL	440	575	665	81	755	890	820
	APR-SEP	490	630	730	81	830	970	900
TEANAWAY near Cle Elum	APR-JUL	77	101	117	82	133	157	143
	APR-SEP	80	104	120	82	136	160	146

UPPER YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage ***		
		This Year	Last Year	Avg
KEECHELUS	157.8	40.4	74.2	78.0
KACHESS	239.0	52.9	93.3	125.5
CLE ELUM	436.9	64.3	181.2	194.7

UPPER YAKIMA RIVER BASIN Watershed Snowpack Analysis - January 1, 2006

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
UPPER YAKIMA RIVER	9	300	84

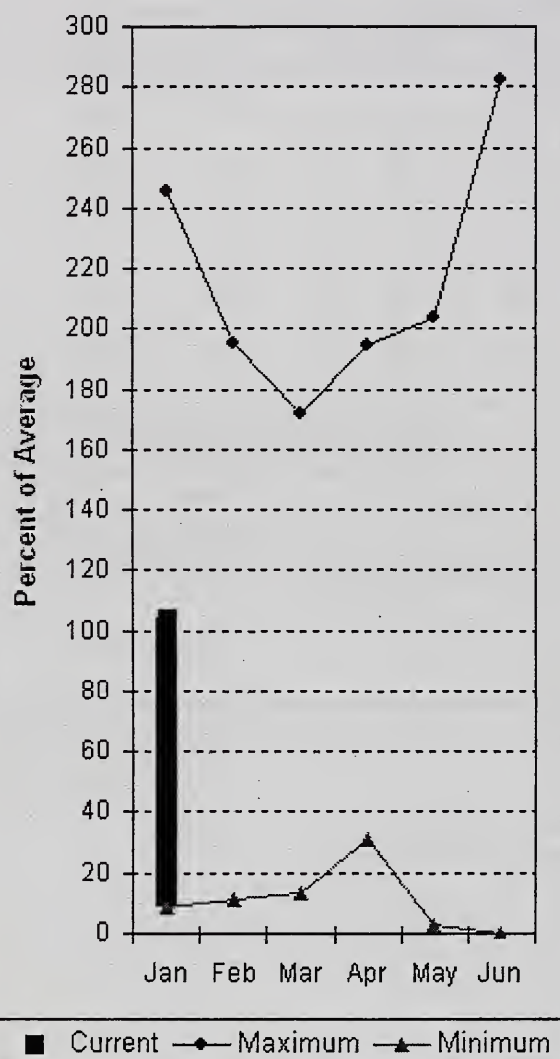
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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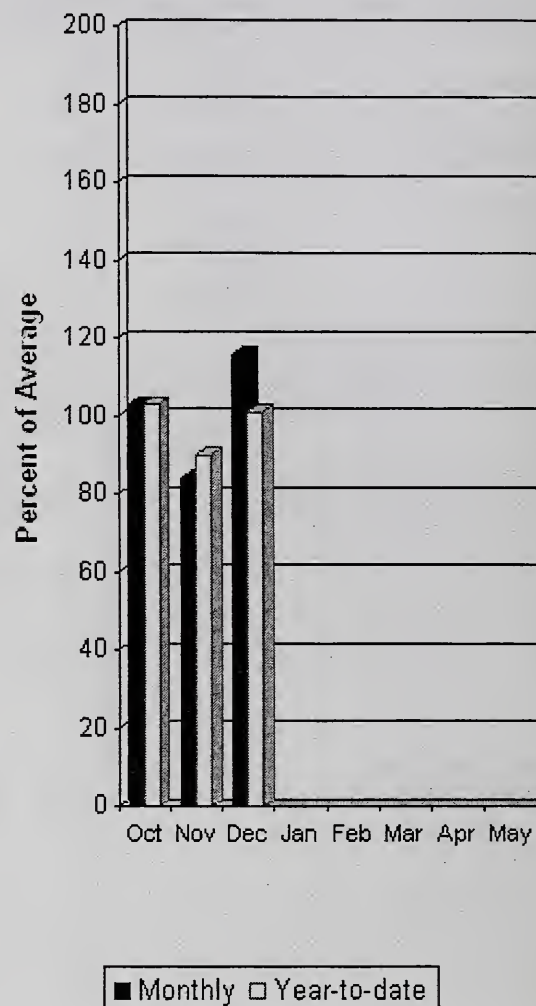
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Lower Yakima River Basin

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

December average streamflows within the basin were: Yakima River near Parker, 72%; Naches River near Naches, 87%; and Yakima River at Kiona, 43%. January 1 reservoir storage for Bumping and Rimrock reservoirs was 80,000-acre feet, 72% of average. Forecast averages for Yakima River near Parker are 89%; American River near Nile, 97%; Ahtanum Creek, 94%; and Klickitat River near Glenwood, 89%. January 1 snowpack was 104% based upon 5 snow course and SNOTEL readings within the Lower Yakima Basin and Ahtanum Creek reported in at 114% of average. Precipitation was 116% of average for December and 101% year-to-date for water. Temperatures were 3 degrees below normal December and 2 degrees below average for the water year. Volume forecasts for Yakima Basin are for natural flow. As such, they January differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

For more information contact your local Natural Resources Conservation Service office.

Lower Yakima River Basin

Streamflow Forecasts - January 1, 2006

		<<===== Drier ===== Future Conditions ===== Wetter =====>>						
Forecast Point	Forecast Period	=====		Chance Of Exceeding *		=====		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
BUMPING LAKE INFLOW	APR-SEP	90	114	130	99	146	170	132
	APR-JUL	85	106	120	98	134	155	122
AMERICAN RIVER near Nile	APR-SEP	83	101	114	97	127	145	118
	APR-JUL	76	93	105	97	117	134	108
RIMROCK LAKE INFLOW	APR-SEP	175	210	230	96	250	285	240
	APR-JUL	150	177	196	96	216	241	205
NACHES near Naches	APR-SEP	590	715	800	96	885	1005	835
	APR-JUL	535	650	730	96	810	925	760
AHTANUM CREEK at Union Gap	APR-SEP	14.3	24	30	94	36	46	32
	APR-JUL	13.3	22	28	93	34	43	30
YAKIMA near Parker	APR-SEP	1210	1500	1700	89	1900	2190	1920
	APR-JUL	1070	1340	1530	88	1720	1990	1730
KLICKITAT near Glenwood	APR-JUN	79	101	115	89	129	151	129
	APR-SEP	100	127	145	89	163	190	163

LOWER YAKIMA RIVER BASIN					LOWER YAKIMA RIVER BASIN		
Reservoir Storage (1000 AF) - End of December					Watershed Snowpack Analysis - January 1, 2006		
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average
		This Year	Last Year	Avg			
BUMPING LAKE	33.7	15.1	20.0	10.3			
RIMROCK	198.0	64.7	109.8	101.1			

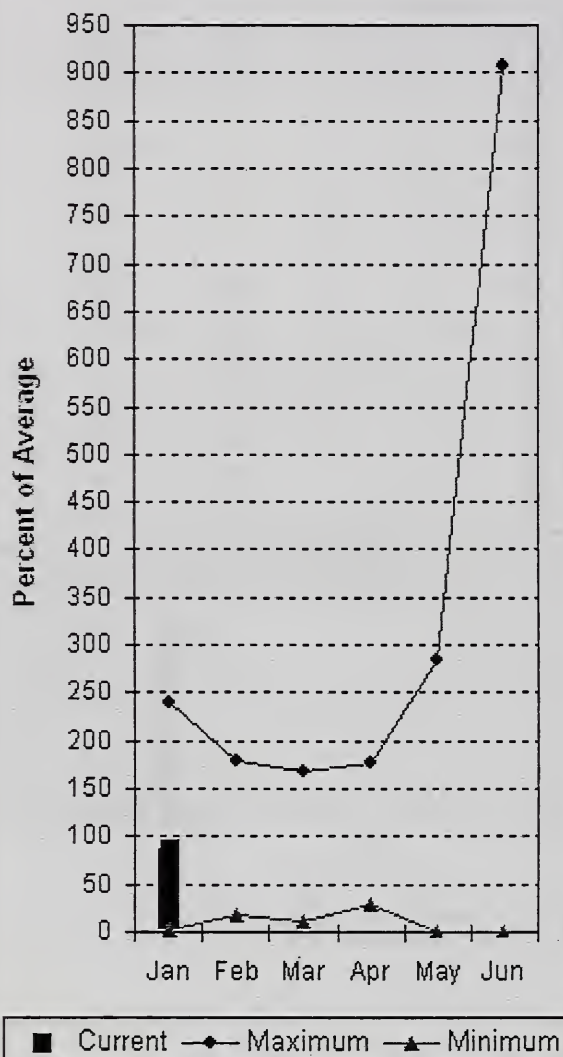
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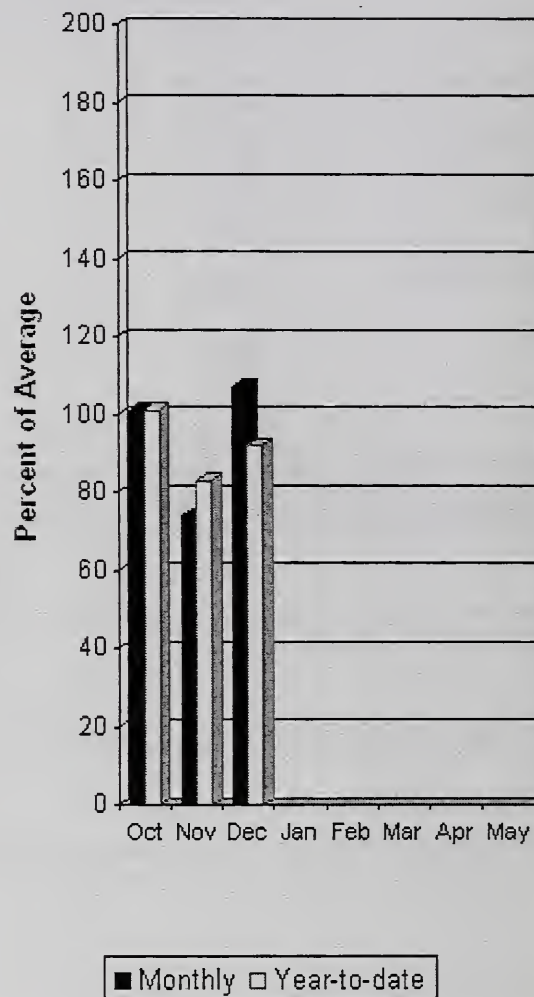
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Walla Walla River Basin

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

December precipitation was 107% of average, maintaining the year-to-date precipitation at 92% of average. Snowpack in the basin was 88% of average. Streamflow forecasts are 90% of average for Mill Creek and 105% for the SF Walla Walla near Milton-Freewater. December streamflow was 78% of average for the Walla Walla River. Average temperatures were 3 degrees below normal for December and 1 degree below average for the water year.

For more information contact your local Natural Resources Conservation Service office.

Walla Walla River Basin

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
MILL CREEK at Walla Walla	APR-SEP	6.7	12.5	16.5	90	21	27	18.4
	APR-JUL	6.5	12.3	16.3	90	21	26	18.2
SF WALLA WALLA near Milton-Freewater	APR-JUL	44	51	56	104	61	68	54
	APR-SEP	57	65	70	105	75	83	67

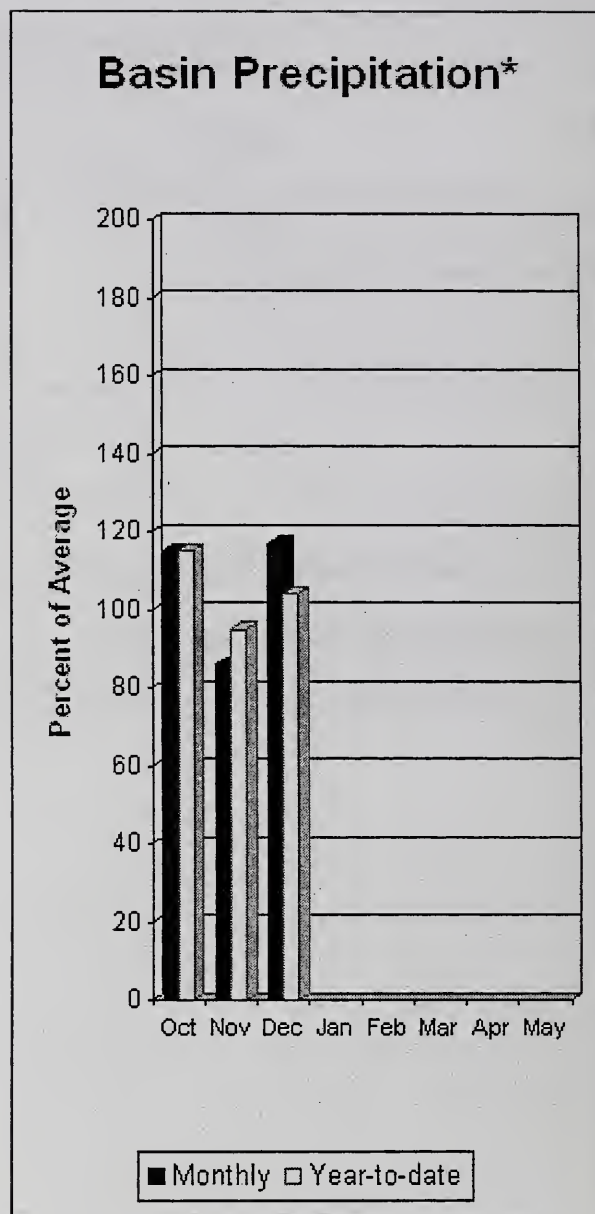
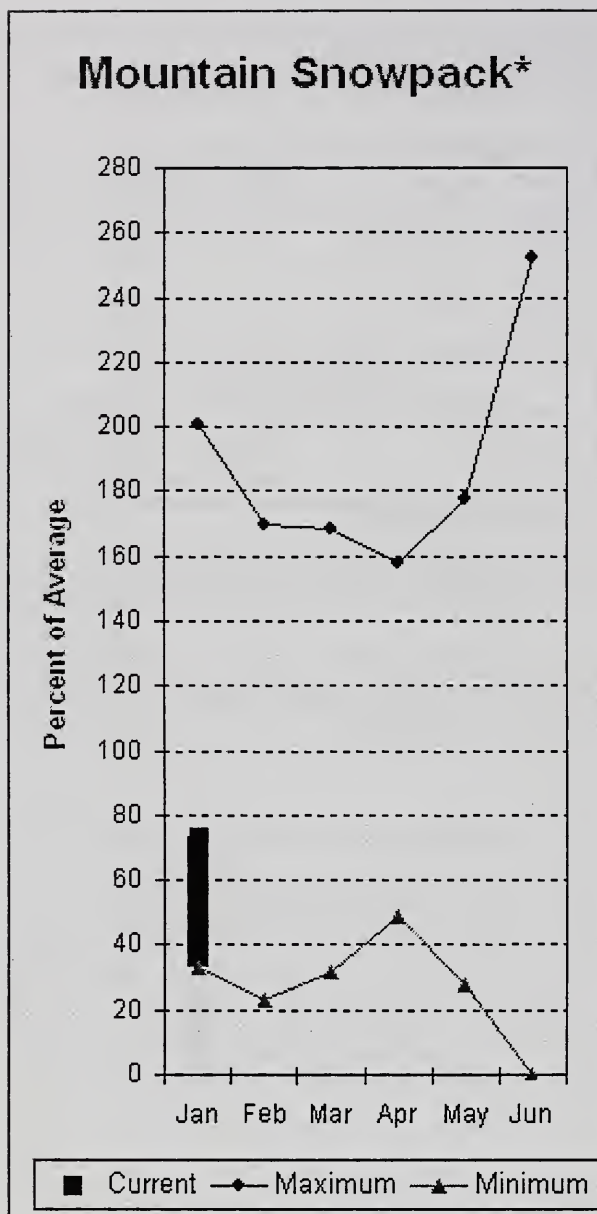
WALLA WALLA RIVER BASIN Reservoir Storage (1000 AF) - End of December					WALLA WALLA RIVER BASIN Watershed Snowpack Analysis - January 1, 2006			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					WALLA WALLA RIVER	2	234	88

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

Lower Snake River Basin



*Based on selected stations

The April - September forecast is for 100% for Clearwater River at Spalding. The Snake and Grande Ronde rivers can expect summer flows to be about 105% and 107% of normal respectively. December precipitation was 117% of average, bringing the year-to-date precipitation to 104% of average. January 1 snowpack readings averaged 73% of normal. December streamflow was 76% of average for Snake River below Lower Granite Dam and 62% for Grande Ronde River near Troy. Average temperatures were 2 degrees below normal for December and near normal for the water year.

For more information contact your local Natural Resources Conservation Service office.

Lower Snake River Basin

Streamflow Forecasts - January 1, 2006

		<<===== Drier ===== Future Conditions ===== Wetter =====>>						
Forecast Point	Forecast Period	Chance Of Exceeding *						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
=====								
GRANDE RONDE at Troy (1)	MAR-JUL	937	1448	1680	106	1910	2425	1580
	APR-SEP	786	1250	1460	107	1670	2135	1370
=====								
CLEARWATER at Spalding (1,2)	APR-JUL	3690	6260	7430	100	8600	11170	7430
	APR-SEP	4110	6680	7850	100	9020	11590	7850
=====								
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	11970	19304	22700	105	26100	33570	21600
	APR-SEP	13182	21584	25400	105	29220	37620	24100

LOWER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of December					LOWER SNAKE RIVER BASIN Watershed Snowpack Analysis - January 1, 2006			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DWORSHAK	3468.0	2292.6	2627.3	2228.2	LOWER SNAKE, GRANDE RONDE	11	137	73

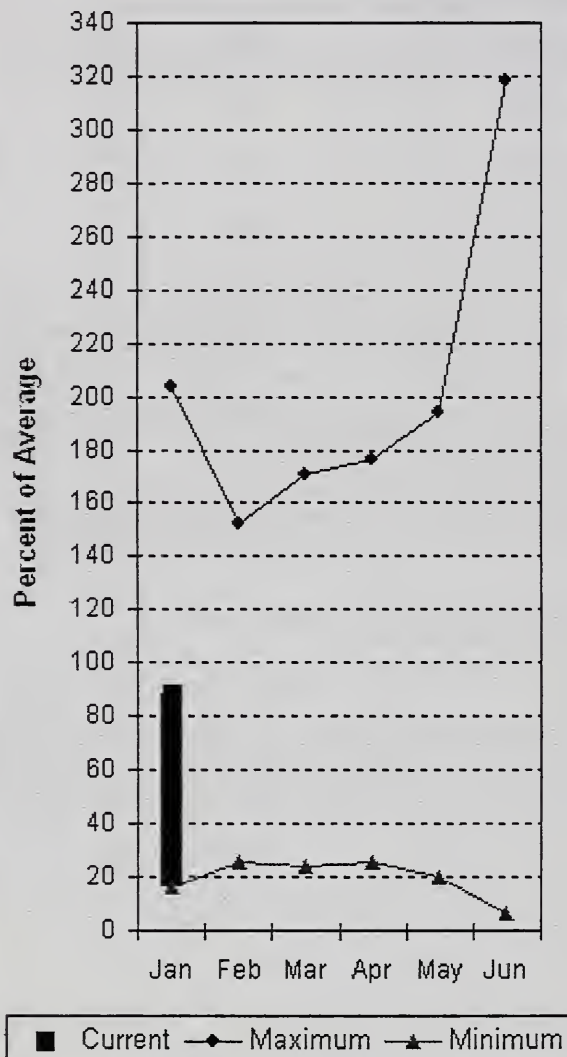
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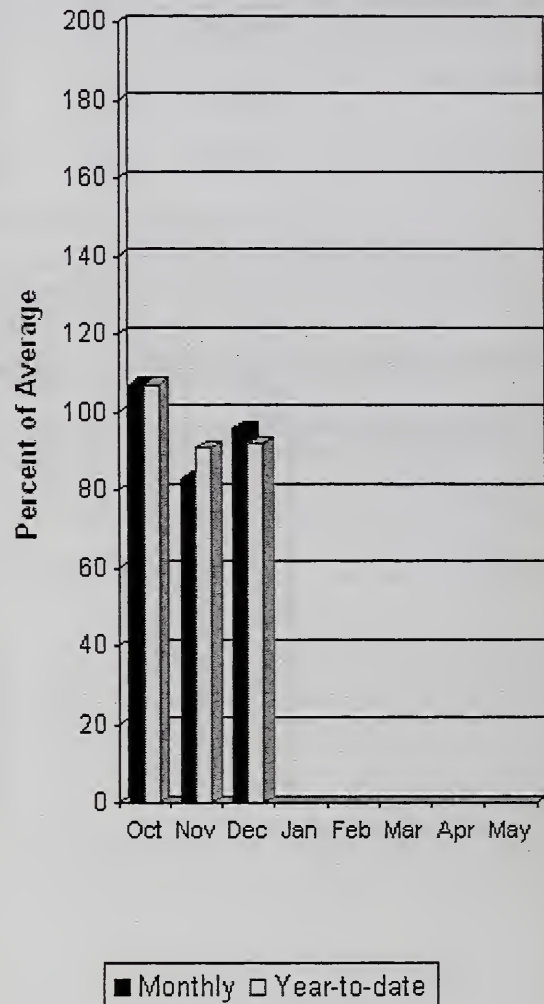
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Cowlitz - Lewis River Basins

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

Forecasts for April – September streamflows within the basin are Lewis River at Ariel, 96% and Cowlitz River at Castle Rock, 93% of average. The Columbia at The Dalles is forecasted to have 94% of average flows this summer. December average streamflow for Cowlitz River was 77% and 75% for Lewis River. The Columbia River at The Dalles was 83% of average. December precipitation was 96% of average and the water-year average was 92%. January 1 snow cover for Cowlitz River was 82%, and Lewis River was 93% of average. Average temperatures have been near normal during December and throughout the water year.

For more information contact your local Natural Resources Conservation Service office.

Cowlitz - Lewis River Basins

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
LEWIS at Ariel (2)	APR-JUL	685	872	1000	97	1128	1315	1031
	APR-SEP	804	998	1130	96	1262	1456	1176
COWLITZ R. bl Mayfield Dam (2)	APR-SEP	430	1246	1800	94	2354	3170	1922
	APR-JUL	212	1027	1580	94	2133	2948	1689
COWLITZ R. at Castle Rock (2)	APR-SEP	553	1688	2460	93	3232	4367	2639
	APR-JUL	1558	1905	2140	93	2375	2722	2295
KLICKITAT near Glenwood	APR-JUN	79	101	115	89	129	151	129
	APR-SEP	100	127	145	89	163	190	163
COLUMBIA R. at The Dalles (2)	APR-SEP	62830	83404	92700	94	102000	122980	98600
	APR-JUL	54632	69558	79700	94	89840	104770	84600

COWLITZ - LEWIS RIVER BASINS Reservoir Storage (1000 AF) - End of December

COWLITZ - LEWIS RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MOSSYROCK	0.0	1207.4	1268.5	---	LEWIS RIVER	4	239	93
SWIFT	0.0	646.6	692.8	---	COWLITZ RIVER	5	197	82
YALE	0.0	377.1	357.6	---				
MERWIN	0.0	392.4	410.0	---				

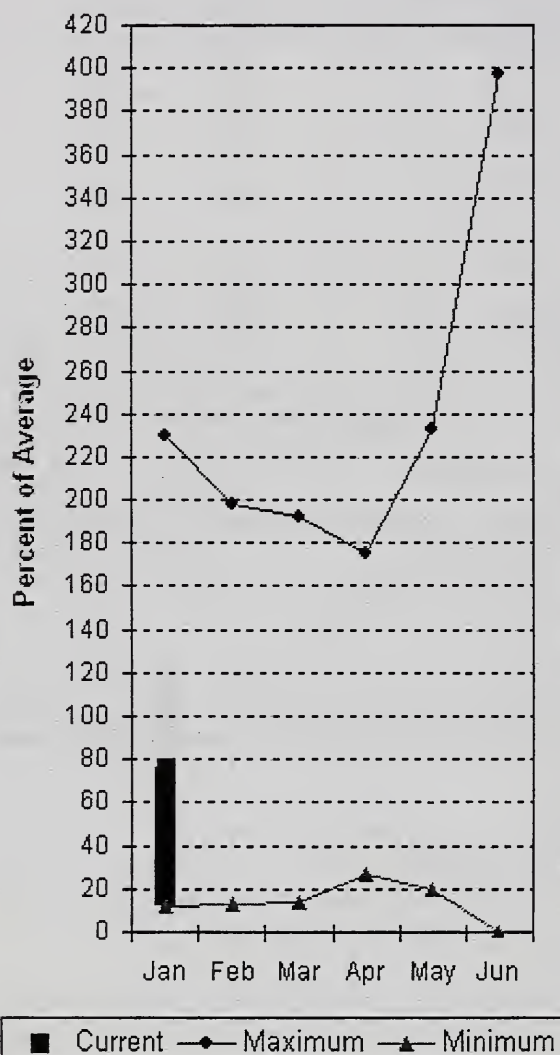
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The average is computed for the 1971-2000 base period.

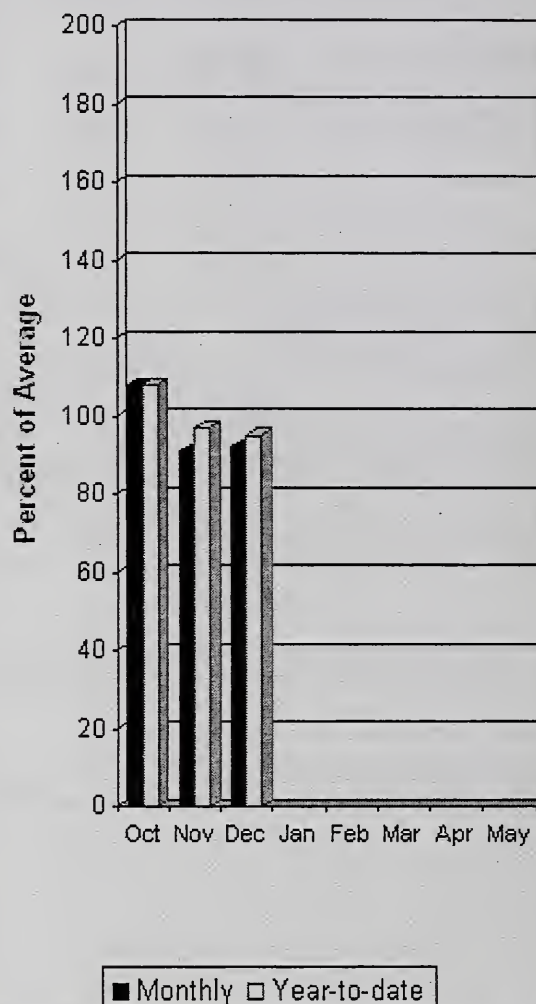
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White - Green River Basins

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

Summer runoff is forecast to be 82% of normal for the Green River below Howard Hanson Dam and 85% for the White River near Buckley. January 1 snowpack was 104% of average in both White River and Puyallup River basins and 47% in Green River Basin. Water content on January 1 at Corral Pass SNOTEL, at an elevation of 6,000 feet, was 14.6 inches. This site has a January 1 average of 15.8 inches. December precipitation was 92% of average, bringing the water year-to-date to 95% of average for the basins. Average temperatures in the area were near normal for December and for the water-year.

For more information contact your local Natural Resources Conservation Service office.

White - Green - Puyallup River Basins

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
WHITE near Buckley (1,2)	APR-JUL	252	340	380	86	420	508	440
	APR-SEP	309	409	455	85	501	601	534
GREEN R below Howard Hansen (1,2)	APR-JUL	85	167	204	84	241	323	243
	APR-SEP	92	180	220	82	260	348	268

WHITE - GREEN - PUYALLUP RIVER BASINS Reservoir Storage (1000 AF) - End of December

WHITE - GREEN - PUYALLUP RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					WHITE RIVER	2	224	104
					GREEN RIVER	7	197	52
					PUYALLUP RIVER	2	218	104

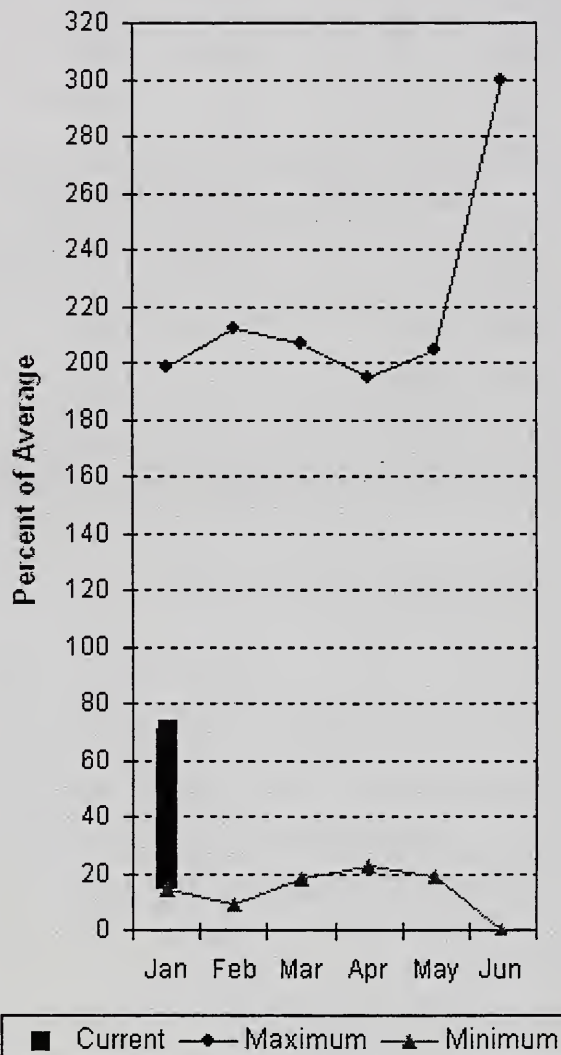
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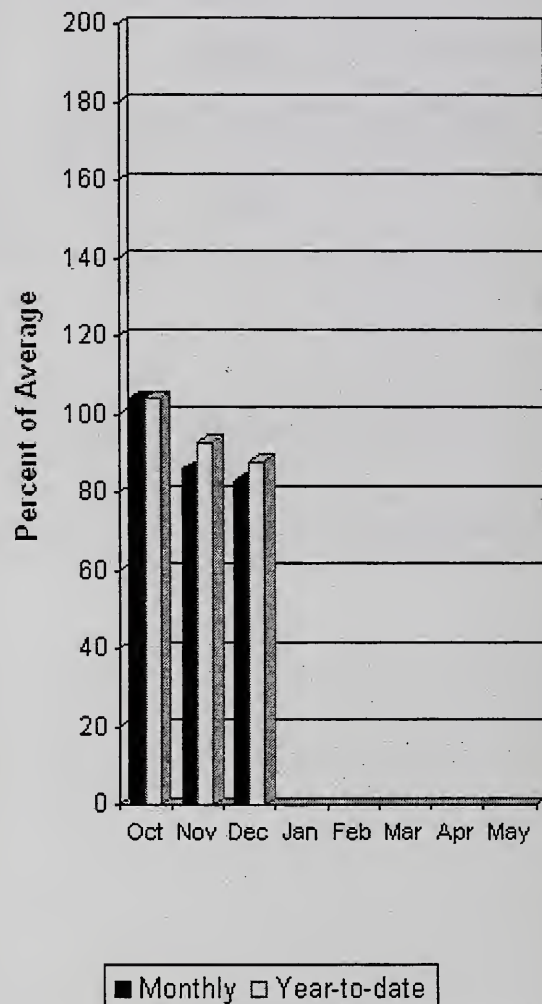
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Central Puget Sound River Basins

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

Forecast for spring and summer flows are: 89% for Cedar River near Cedar Falls; 89% for Rex River; 89% for South Fork of the Tolt River; and 85% for Cedar River at Cedar Falls. Basin-wide precipitation for December was 83% of average, bringing water-year-to-date to 88% of average. January 1 average snow cover in Cedar River Basin was 75%, Tolt River Basin was 61%, Snoqualmie River Basin was 74%, and Skykomish River Basin was 75%. Olallie Meadows SNOTEL site, at 3960 feet, had 19.9 inches of water content. Average January 1 water content is 22.2 inches at Olallie Meadows. Temperatures were 3 degrees above average for December and 1 degree above normal for the water-year.

For more information contact your local Natural Resources Conservation Service office.

Central Puget Sound River Basins

Streamflow Forecasts - January 1, 2006

		<<===== Drier ===== Future Conditions ===== Wetter =====>>							
Forecast Point	Forecast Period	=====		Chance Of Exceeding *		=====		30-Yr Avg. (1000AF)	
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)		
CEDAR near Cedar Falls	APR-JUL	35	52	63	86	74	91	73	
	APR-SEP	42	59	71	89	83	100	80	
REX near Cedar Falls	APR-JUL	12.0	18.6	23	92	27	34	25	
	APR-SEP	13.3	20	25	89	30	37	28	
CEDAR RIVER at Cedar Falls	APR-JUL	18.3	45	63	85	81	108	74	
	APR-SEP	14.3	43	62	85	81	110	73	
SOUTH FORK TOLT near Index	APR-JUL	9.3	11.5	13.0	88	14.5	16.7	14.7	
	APR-SEP	10.7	13.3	15.0	89	16.7	19.3	16.9	

CENTRAL PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of December

CENTRAL PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

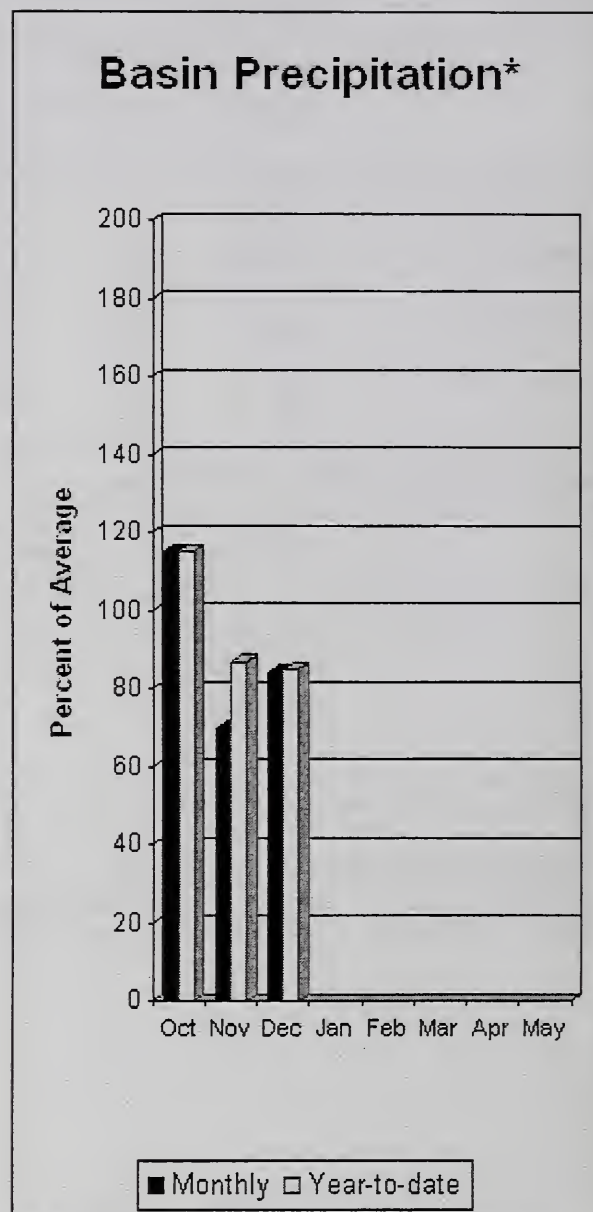
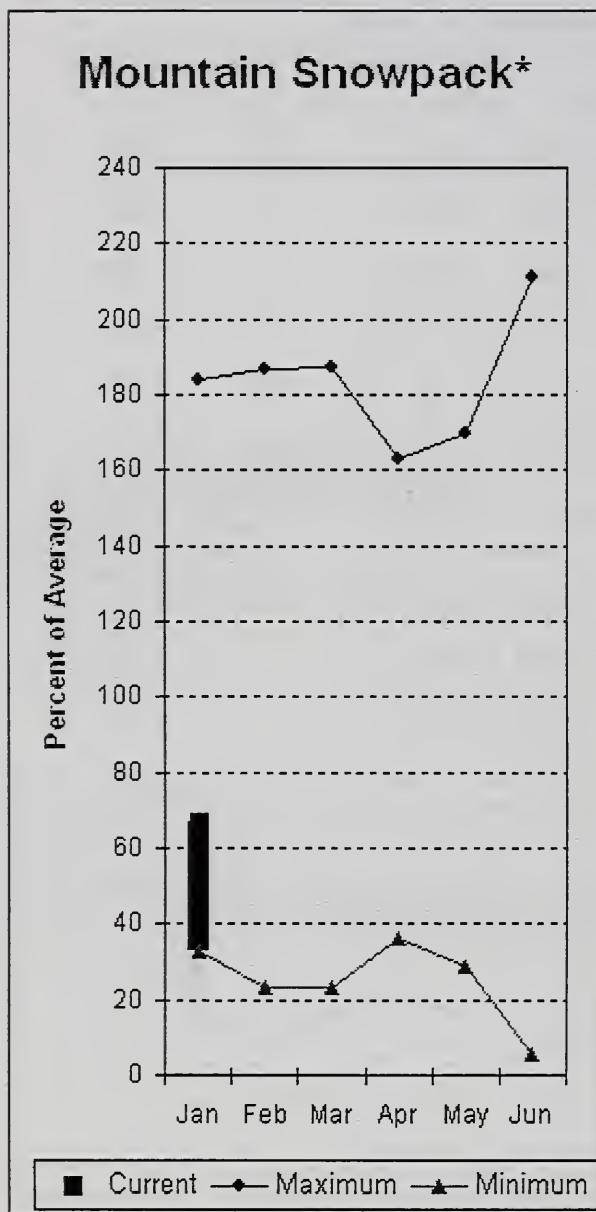
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					CEDAR RIVER	4	290	75
					TOLT RIVER	2	229	61
					SNOQUALMIE RIVER	4	293	74
					SKYKOMISH RIVER	3	242	75

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North Puget Sound River Basins



*Based on selected stations

Forecast for Skagit River streamflow at Newhalem is 88% of average for the spring and summer period. December streamflow in Skagit River was 99% of average. Other forecast points included Baker River at 89% and Thunder Creek at 90% of average. Basin-wide precipitation for December was 84% of average, bringing water-year-to-date to 85% of average. January 1 average snow cover in Skagit River Basin was 60%, and Nooksack River Basin was 90% at the Elbow Lake SNOTEL site. Baker River Basin snow surveys were not conducted this month. Rainy Pass SNOTEL, at 4,780 feet, had 11.3 inches of water content. Average January 1 water content is 19.9 inches at Rainy Pass. January 1 Skagit River reservoir storage was 94% of average and 77% of capacity. Average temperatures for December were 3 degrees above normal for the basin and 1 degree above average for the water year.

For more information contact your local Natural Resources Conservation Service office.

North Puget Sound River Basins

Streamflow Forecasts - January 1, 2006

		<===== Drier ===== Future Conditions ===== Wetter =====>						
Forecast Point	Forecast Period	=====		Chance Of Exceeding *		=====		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
THUNDER CREEK near Newhalem	APR-JUL	177	197	210	90	223	243	234
	APR-SEP	261	284	300	90	316	339	333
SKAGIT at Newhalem (2)	APR-JUL	1469	1601	1690	91	1779	1911	1864
	APR-SEP	1682	1841	1950	88	2059	2218	2217
BAKER RIVER near Concrete	APR-JUL	564	663	730	88	797	896	828
	APR-SEP	743	854	930	89	1006	1117	1050

NORTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage ***		
		This Year	Last Year	Avg
ROSS	1404.1	1063.2	1229.4	1142.1
DIABLO RESERVOIR	90.6	86.1	87.2	85.3

NORTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
SKAGIT RIVER	4	130	60
BAKER RIVER	2	0	51
NOOKSACK RIVER	1	147	90

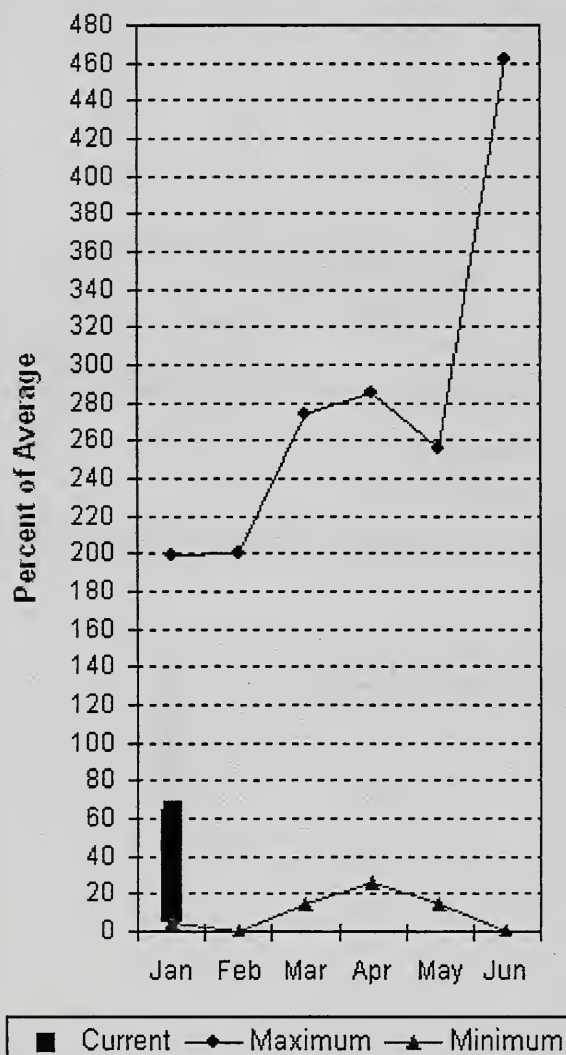
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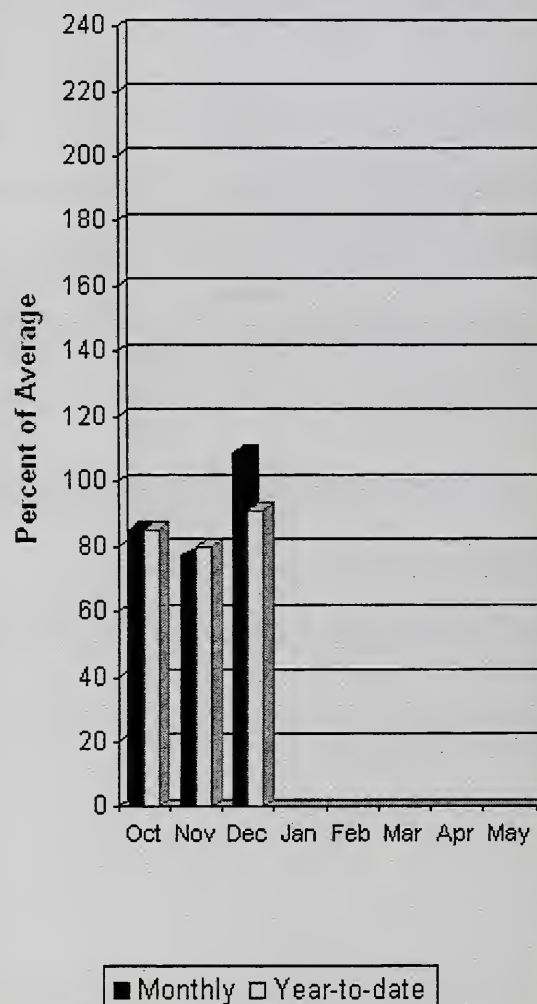
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Olympic Peninsula River Basins

Mountain Snowpack*



Basin Precipitation*



*Based on selected stations

Forecasted average runoff for streamflow for the Dungeness and Elwha rivers is 94% and 97% respectively. December runoff in the Dungeness River was 110% of normal. Big Quilcene and Wynoochee rivers should expect near average runoff this summer also. December precipitation was 109% of average. Precipitation has accumulated at 91% of average for the water year. December precipitation at Quillayute was 9.3 inches. The thirty-year average for December is 14.5 inches. Olympic Peninsula snowpack averaged 65% of normal on January 1. Temperatures were 3 degrees above average for December and 1 degree above average for the water year.

For more information contact your local Natural Resources Conservation Service office.

Olympic Peninsula River Basins

Streamflow Forecasts - January 1, 2006

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DUNGENESS near Sequim	APR-SEP	102	126	143	94	160	184	152
	APR-JUL	84	104	118	95	132	152	124
ELWHA near Port Angeles	APR-SEP	347	432	490	97	548	633	503
	APR-JUL	286	354	400	96	446	514	419

OLYMPIC PENINSULA RIVER BASINS Reservoir Storage (1000 AF) - End of December

OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - January 1, 2006

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					OLYMPIC PENINSULA	1	125	65

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The Following Organizations Cooperate with the Natural Resources Conservation Service in Snow Survey Work*:

Canada	Ministry of Sustainable Resources Snow Survey, River Forecast Centre, Victoria, British Columbia
State	Washington State Department of Ecology Washington State Department of Natural Resources
Federal	Department of the Army Corps of Engineers U.S. Department of Agriculture Forest Service U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bonneville Power Administration Bureau of Reclamation Geological Survey National Park Service Bureau of Indian Affairs
Local	City of Tacoma City of Seattle Chelan County P.U.D. Pacific Power and Light Company Puget Sound Power and Light Company Washington Water Power Company Snohomish County P.U.D. Colville Confederated Tribes Spokane County Yakama Indian Nation Whatcom County Pierce County
Private	Okanogan Irrigation District Wenatchee Heights Irrigation District Newman Lake Homeowners Association Whitestone Reclamation District

*Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.



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Washington Water Supply Outlook Report

Natural Resources Conservation Service
Spokane, WA

